

OUTCOMES FROM:

Environmental Justice in Canada? Identifying a role for public health research and practice

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Environmental Justice in Canada? Identifying a role for public health research and practice

SUMMARY

In recent years, environmental justice has gained considerable currency in global academic, policy, and advocacy discussions about the impacts of environmental degradation on the health of vulnerable populations. In general terms, environmental justice is a response to the inequitable production and distribution of environmentally-mediated threats and benefits that results from systemic discrimination against specific population groups on the basis of race, ethnicity, gender, class, disability, and age.

In Canada, while environmental justice has been taking root in many grassroots efforts to mobilize communities against environmental threats, there has been little attention given to its basic principles or potential for application within public health research, policy, and practice. To-date there has been little scrutiny of the disproportionate impacts of environmental burdens on the population health status of Canadians, even amidst the recent emphasis on the social determinants of health as documented in the forthcoming WHO Commission on the Social Determinants of Health and through Canada's own Senate Sub-Committee on Population Health. There are glaring gaps that must be addressed.

From a public health perspective, environmental justice can be an effective organizing and mobilizing framework upon which to address basic human needs including adequate nutrition, shelter, sanitation, and safe working conditions. At a more fundamental level, environmental justice is also about maximizing opportunities for full democratic participation in the governance of a healthy and sustainable society.

On July 3rd, 2008, the *Canadian Network on Environment, Health, and Social Equity* (CNEHSE), in partnership with the organizations listed above, hosted a two-hour discussion with 16 conference participants to identify possible role(s) of public health in promoting environmental justice in Canada. The workshop objectives included:

- 1) To review the history, best practices, and challenges of environmental justice in the Canadian context;
- 2) To discuss the benefits of developing capacity in public health research, policy, and practice in promoting environmental justice in Canada; and
- 3) To identify the strengths, weaknesses, opportunities, and threats for the development of a national agenda for promoting an environmental justice agenda in public health.

The first half of the workshop included presentations given by four panelists who outlined the key principles, priority populations, and challenges to adopting environmental justice as an organizing and mobilizing framework for public health research, policy, and community action in Canada. Participants then engaged in a facilitated discussion to identify specific internal strengths and weaknesses of addressing environmental justice issues within the field of public health, as well as external opportunities and threats for public health in advancing an environmental justice agenda in Canada. This report summarizes the key issues and findings from the workshop discussions.

PRESENTATIONS

The following summaries are based on notes and reflections taken from the workshop presentations. For copies of the PowerPoint slides, please email jeff.masuda@cnehse.ca.

Jeff Masuda: *Environmental justice as a framework for public health in Canada*

Environmental justice has a long and complex history. It is simultaneously a grassroots movement, a research paradigm, a policy framework, and a political ideology (see Figure 1). More importantly, it is **a basis for moving forward together** among researchers, policy-makers, and communities who share a common goal of reducing health inequalities resulting from discriminatory environmental practices.

Environmental justice, while commonly thought of as only the 'unfair *distribution* of hazards', also needs to be considered as the *process* for enabling groups to:

- reorient economic, health, and environmental systems in ways that redress past and present discrimination to ensure that environmental risks and hazards are equally distributed at all jurisdictional levels;
- improve access to environmental investments, benefits, and natural resources;
- promote access to information and participation in decisions that influence the optimal conditions for their own health and wellbeing.

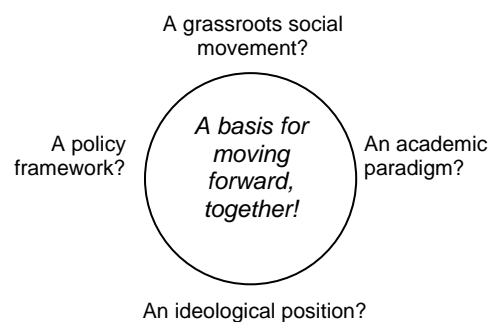


Figure 1. What is environmental justice?

While there are a growing number of studies which have documented the disproportionate allocation of environmental hazards and risks in some segments of the Canadian population, more recent analyses recognize that achieving environmental justice requires that we consider such disproportionality as the consequence of negligence toward the broad range of health determinants that include the structures which both expose specific groups to environmental harms as well as impose limitations on accessing environmental benefits. This means that injustices can be found not only in the places in which we locate hazardous facilities or products but also in the processes in which neighbourhoods, cities, and whole societies are designed, developed, governed, and experienced.

Seen as a *process*, the analysis of, and action toward, achieving environmental justice must not only consider correcting the unequal distribution of harms and benefits, but must also address the underlying intermediate procedures as well as distal societal structures which have historically discriminated against certain groups based on their social status.

In the historical context, achieving environmental justice must therefore provide more equitable opportunities to participate in processes and decisions to improve environmental conditions for groups traditionally marginalized by mainstream society. It must also include strategies to redress the historical conditions which have constituted past injustices and perpetuate to this day in ongoing socioeconomic marginalization and growing health inequalities (see Figure 2).

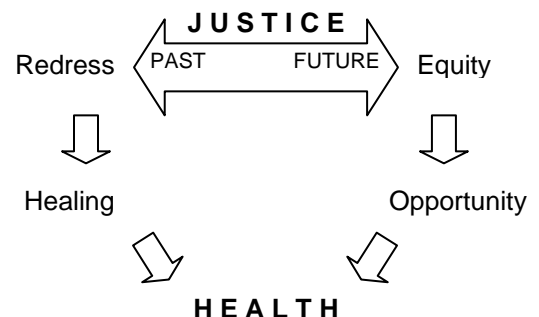


Figure 2. Pathways to environmental justice

Such strategies should also pay attention to the intersections between environmental and other determinants of health and must include sustainability as a key principle and priority for action.

Theresa McClenaghan: *Priority populations and issues in Canada*

Canada's geographic and sociopolitical history differs significantly from that of the U.S. where much of the activism and scholarship on environmental justice has originated. Therefore, the pursuit of environmental justice in Canada must begin with an analysis of our nation's record of societally-embedded discrimination, and often overt persecution against many of its citizens who have borne the consequences of uneven geographic development. The vanguard of environmental justice work in Canada to-date has demonstrated how colonialism, urbanization, and the expansion of the natural resource economy have contributed to the disadvantage of four specific populations:

1. **Resource-dependent communities.** As a natural resource-dependent nation, Canadians have benefited greatly from the economic and employment opportunities associated with the growth of the agricultural, forestry, oil and gas, mining, and hydroelectric sectors. While many small towns and regions across the nation have developed and prospered alongside the growth of industry, less attention has been given to the environmental health legacy associated with their by-products and ecosystem impacts, or to the lasting effects once resources run out and industries collapse. As a result, there are many communities in Canada that continue to bear an inequitable environmental health burden from past and present practices, even as the rest of the nation prospers.
2. **First Nations communities.** By far, Canada's Aboriginal Peoples have been among the most severely impacted by resource development and industrialization. As settlement (and displacement) moved West and the land base was increasingly occupied by agricultural and natural resource development, First Nations communities across Canada were most often located in places considered to be less undesirable from the perspective of European settlers. Consequently, they have suffered from myriad toxic legacies placed upon them by centuries of (first) colonial oppression and (ongoing) post-colonial exclusion from the decisions and benefits of natural resource and industrial development which have occurred, in many cases literally, in their backyards;
3. **Low-income and ethno-racial communities.** Predominantly in the urban context, many communities have been exposed to the externalities and deprived of the benefits resulting from the development of Canadian cities over the course of the 20th century. As cities have expanded, rationalist urban planning approaches governed by urban elites have tended to benefit the growing middle-class while allowing, and in many cases planning for, the deterioration of some parts of the city. Yet, these same places have continued to be destinations for low-income and immigrant groups who have struggled together against ongoing socioeconomic and ethno-racial exclusion. Over the course of time, deterioration has continued even as knowledge has increased about the hazards associated with air pollution, toxic legacies of 'Brownfield sites', and traffic congestion. More recently, environmental injustices have also been identified via the uneven distribution of urban amenities such as green space and access to urban waterfronts. Under these conditions, these communities continue to find themselves in some cases isolated and entrapped, and in other cases displaced as a consequence of de-industrialization and gentrification that are common in elitist planning and policy decision-making practices.
4. **Biologically vulnerable populations.** Many populations in Canada, including children, the elderly, and immuno-compromised individuals (e.g. pregnant women, people with chronic conditions), have higher susceptibility to environmental stressors which places them at greater risk from pollution. Yet, these groups are not adequately protected under current environmental policies and are generally under-represented in Canadian standard setting and regulatory processes. Further, the lack of appropriate and accessible information available to communities undermines the principle of consent and contributes to environmental injustice. Further, there is

presently little understanding of how biological vulnerability intersects with entrenched social inequities to exacerbate the overall magnitude of environmental injustices against these groups.

Margot Parkes: *International precedents for environmental justice*

Considerations of environmental health, equity and justice have a wide range of international precedents. Environmental summits (e.g. Rio 1992; Johannesburg 2002) have advanced polluter-pays & precautionary principles. International conventions, protocols, and agreements such as Climate (Kyoto), hazardous wastes (Basel), Ozone (Montreal), have made environmental issues a political priority among signatory nations. Key statements such as the UN Declaration on the Rights of Indigenous Peoples ('94-'07) have helped to connect environmental health among peoples common experiences of persecution and have profound implications for the field of environmental justice internationally. While many of these agreements lack the ability to impose significant legal or political accountability on violating nations, they are nonetheless an important point of reference for putting political pressure on countries like Canada and New Zealand who have recently given less support to global environmental objectives.

In the international arena, considerable progress on advancing the environmental justice perspective in public health has been made outside of Canada and in the non-Anglophone literature. For example:

- Latin American social medicine – often not available in English – but efforts have been made to increase awareness – such as 2003 series in American Journal of Public Health¹
- Jaime Breilh (from Ecuador) provides a specific example of important scholarship emerging from Latin America, with a focus on structural inequities and what he describes as destructive and protective interactions of “global, particular and singular” influences on health profiles of individuals and communities²

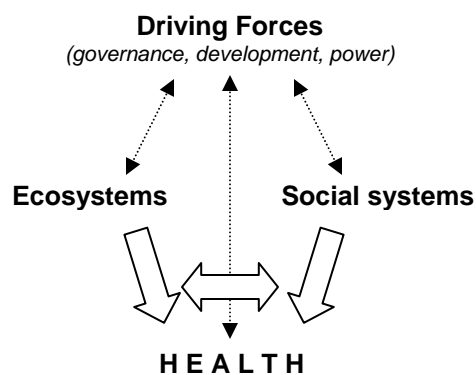


Figure 3. Ecohealth's public health double-dividend, Adapted from Parkes 2003

Ecosystem approaches to health (also known as EcoHealth) represent another body of work that is informed by international experience and with relevance to environmental justice. As shown in Figure 3, an EcoHealth approach can result in a “place based ‘double dividend’” which sees both ecosystems and social systems as important contributors to positive public health outcomes – thus linking concerns of the ecosystem sustainability with social equity.

In Canada, the International Development Research Centre (IDRC) has provided considerable leadership in promoting EcoHealth. IDRC has advanced a three pillar approach – focused on transdisciplinary, participation, and equity – as a strategy for promoting EcoHealth as an emergent research and policy priority in the global arena (see www.idrc.ca/ecohealth). In recent years, IDRC has been supporting development of these approaches through Communities of Practice in EcoHealth (CoPEH) in Latin America, the Middle East, and South East Asia. Recognizing the need for capacity building in Canada- a Canadian Community of Practice (www.copeh-canada.org) is now being supported to make links to environmental health issues here in Canada – as well as increasing capacity of Canadians to show leadership internationally.

¹ Krieger, N. (2003) Latin American social medicine: the quest for social justice and public health. . American Journal of Public Health, 93, 1989-1991.

Tajer, D. (2003) Latin American Social Medicine: Roots, Development During the 1990s, and Current Challenges. American Journal of Public Health, 93(12), 2023-2027.

Yamada, S. (2003,) Latin American social medicine and global social medicine. . American Journal of Public Health 93, 1994-1996.

² Breilh, J. (2008) Latin American critical (epidemiology: new settings for an old dream. International Journal of Epidemiology 2008;, doi:10.1093/ije/dyn135, 1

Breilh, J. (2003) Epidemiologia Critica (Critical Epidemiology), Lugar Editorial, Buenos Aires.

Tim Lambert: *Environmental justice in Canadian federalism*

The historical development of Federalism in Canada has created the conditions for ongoing constitutional disputes regarding the jurisdictions over environmental and population health governance. As a result, many environmental issues have become mired in complex and often contradictory legislative and procedural conflicts among local, provincial, and federal stakeholders. From a legislative context, neither the Canadian Environmental Protection Act (CEPA) nor the Canadian Council of Ministers of the Environment (CCME) harmonization accord can adequately address the complex environmental systems that can span multiple media (air, land, and water) as well as move across political boundaries and scales (e.g. transboundary air pollution and transportation of hazardous products and natural resources). Further, CEPA does not presently recognize environmental justice as a necessary prerequisite for the full protection of all Canadians against environmental burdens. Fatal flaws in the CCME accords include the absence of the health sector within the organizational structure, provisions for unilateral withdrawal of provinces from CCME provisions, standards and guidelines, and an inability to set common standards and terms of accountability.

Case examples of ongoing environmental disputes from across Canada illustrate this complexity:

1. **Sydney Tar Ponds.** Nearly 100 years of poorly regulated steel manufacturing in Sydney, Nova Scotia has created a significant environmental health burden for the communities surrounding the former facilities. Federal interests were limited to resource development and production, which meant that pollutants released into the air from the federal facilities' coke ovens, once deposited on the land, became governed under provincial jurisdiction as land contaminants. In Sydney, residential soils – lead, arsenic, and polyaromatic hydrocarbons – are all above CCME guidelines, yet the lands have not been considered impacted. A recent allocation of \$400 million invested into a clean-up excluded the residential contamination, despite EIA guidelines to the contrary. In essence, there was no consideration of children's health, an important and unwitting target of environmental injustice.
2. **Suburban residential expansion in Calgary.** In the 1970's an Imperial Oil storage refinery located on Lynnview Ridge, Calgary was decommissioned and later turned into residential community. Lead contamination in the residential lands were contaminated well above CCME guidelines, however in contrast to Sydney, the CCME guidelines were respected by Provincial Courts, although it has taken 25 years for the site to be cleaned up.
3. **Aamjiwnaang First Nation.** The ongoing struggles within this community, located downwind from a highly industrialized region south of Sarnia, Ontario, illustrates the cross-national consequences of environmental (mis)management. There are currently approximately 40 US and Canadian facilities surrounding this small First Nation community which receives hazardous materials ranging from crude oil from the Alberta tar sands to the industrial waste from Sydney. Alarming evidence of the health impacts of these hazards has been demonstrated through recent evidence of skewed gender ratios in births in this community, and similar ecological effects. Yet, while the health of this community falls under the jurisdiction of Health Canada and Ontario, there is little coordination with the province which is responsible for the regulation of emissions.
4. **Fort Chipewyan.** The Athabasca oil sands – in essence massive tar pits – have engulfed several First Nation communities in Northern Alberta. Proposed expansion plans will make this an even greater impact. In the community of Fort Chipewyan, concerns have been raised about anomalous cancer incidences just north of the tar ponds developments. Responsibility the health of the community and for appropriate environmental stewardship rests with federal and provincial governments respectively, both of whom are also involved in urging the project forward. In addition, there are major concerns about the climate change impacts of the project, an important equity issue for peoples of the North that has global ramifications.
5. **Canada's North.** – The level of mercury in the people of Canada's north are increasing as a consequence of global bioaccumulation from the global pool of releases from various activities

such as coal burning for energy. Activists and others have spent 10 years to get coal plants to reduce mercury, but this commitment only applies in Alberta where there will be reductions because of separate provincial processes implemented there that goes beyond the weaker Canada Wide Standards process. Ontario may also reduce its mercury emissions if it meets its commitments to close coal generation plants

In terms of recommendations, four guiding principles for environmental justice should be included in both the CEPA and CCME. These include:

1. Inclusion of provisions for minimum standards of environmental quality;
2. Acceptance of the precautionary principle as the 'ethical attitude in setting minimum standards;
3. Provisions for public health roles in prevent environmental exposures and promoting healthy environments; do no harm, on the contrary remove the harm and promote the good
4. Fostering community autonomy and ensuring meaningful involvement of the public in decision-making – the process aspect of environmental justice.

SWOT ANALYSIS

Participants discussed the following two questions in order to begin a dialogue on the potential for public health leadership in environmental justice:

- Internal
 - What are the current STRENGTHS and WEAKNESSES within public health in embracing an environmental justice perspective?
- External
 - What are the present and future OPPORTUNITIES and THREATS to promoting an environmental justice agenda in Canada?

Internal Strengths

Public health action on environmental justice can draw on...

- *Existing networks.* There is an already existing, broad distribution of public health professionals who prioritize environmental health. We have precedents of multi/transdisciplinary intersectoral approaches which can be looked to for examples of best practices. There are also ways to move knowledge through the public health system. For example, the work of Toronto Public Health the Medical Officer of Health in the city of Toronto was very instrumental in reviewing and disseminating the evidence on adverse health impacts about pesticide use in support of municipal pesticide by-laws;
- *Existing tools.* There are a number of existing tools in the form of legislation, planning frameworks, and so on and it may be simply a matter of guiding them by advancing an environmental justice lens to current practices;
- *Existing mandate.* Regional/local public health authorities and units are mandated to respond to community concerns. Public health professionals working at these levels are highly influential and respected and can offer powerful credibility to local environmental justice efforts;
- *Existing evidence.* There is an emerging research agenda in Canada which is beginning demonstrate multiple disciplinary and methodological approaches to environmental justice issues;
- *Existing public health framework.* Many aspects of social determinants of health can be applied to environmental justice efforts, however integrating these approaches has not yet occurred;

- *Existing motivation.* Harms we face in Canada require a global justice framework. The local consequences of global problems such as mercury concentration and climate change (e.g. to Canada's North) provide appropriate leverage and motivation for creating Canadian solutions.

Internal Weaknesses

In advancing an environmental justice perspective, public health must address...

- *Lack of interest or awareness.* Many environmental injustices are found outside of, or at larger scales than, the jurisdiction of public health practitioners (e.g. climate change) and are therefore considered lower priority than issues that have immediate consequences to the populations that they represent;
- *Lack of a public health presence.* In First Nations communities there is a notable absence of public health capacity, even at the most basic level, to address pressing environmental issues;
- *Lack of public health buy-in.* The culture of public health, notably among many Medical Officers of Health, is presently entrenched in a conservative and rationalistic paradigm that sees notions of justice as too politicized and against the grain of scientific objectivity. For example, public health involvement in situations such as land use planning and environmental regulation is viewed as interference rather than advocacy;
- *Lack of independence.* Notions of scientific objectivity notwithstanding, many public health officials operate at behest of politicians rather than in the interests of their communities;
- *Lack of champion.* There are presently no champions at appropriate levels in the public health community toward environmental justice. The lack of jurisdictional clarity between Health and Environmental Ministries adds to the inability to find leadership;
- *Lack of concern about cumulative impacts.* Many communities are impacted by more than one hazardous facility. Yet, current environmental regulations, in addition to limitations of science, cannot account for the cumulative impacts on health of multiple hazards. Further, consistent with the logic of development, it often 'makes sense' to locate facilities in places that are already subject to industrial and other noxious land use;
- *Lack of respect.* Western-dominated notions of health reveal a historical lack of respect for more holistic perspectives such as those of indigenous peoples which can obscure many of the cultural consequences of environmental injustice;
- *Lack of true consent* – Without full information and appreciation of its implications, communities cannot truly consent to activities that will affect them;
- *Lack of inclusion of biodiversity* - Public health mandates often do not including biodiversity impacts even though the linkage between ecosystem health and human health is fundamental.

External Opportunities

Public health researchers, policy-makers, and practitioners can take advantage of...

- *Existing entry points.* The success of Canada's First Nations communities in using outstanding land claims to advance environmental issues provides an interesting opportunity to resolve inequitable environmental and economic policies;

- *Growing capacity.* The continued growth in the prominence of public health in Canada (e.g. with the creation of PHAC generally and the NCC Environmental Health specifically) may provide openings for more attention to issues of environmental justice;
- *Natural alliances.* Increased coordination with NGOs who have environmental, health, and social justice mandates can be accomplished through intersectoral networks;
- *Community mobilization.* Despite the hesitancy of the scientific and policy sectors to embrace environmental justice, communities across Canada have already begun to coalesce around issues at local to global scales.

External Threats

Barriers to public health leadership include...

- *Lack of accountability.* There is a public perception that the appropriate institutional structures are in place to resolve environmental injustices when in fact many remain problems outstanding after years, even decades, of inaction. In many cases, environmental injustices are direct consequences of the research/policy lacunae that currently exists within Canadian environmental and health governance;
- *Lack of visibility.* Environmental injustices, especially those committed against aboriginal communities do not receive adequate attention in mainstream political or popular discourse which is all too often under the influence of hegemonic health care and medical priorities;
- *Co-option of environmental agenda.* Much of the public discourse around major environmental issues such as climate change has been co-opted by government and corporate campaigns that have resulted in what is now referred to as 'greenwashing'. Further the current emphasis on adaptation may lead to a sense of fatalism about the future state of the environment at the expense of efforts focused on prevention and precaution;
- *Federalism.* Political infighting and funding competition among the different levels of government undermines collective efforts to promote environmental justice;
- *Disciplinary fragmentation.* Similarly, the current state of fragmentation within the research community and the lack of epistemological and methodological integration prevents a systems approach to resolving complex environmental health problems;
- *Narrow view of what constitutes evidence.* Environmental justice is often only considered legitimate when held against the standard of hard scientific evidence. Many health and quality of life outcomes experienced by people who face environmental burdens are difficult to measure, and therefore discounted in scientific and political discourses;
- *Over-burdened agencies.* Many organizations from the grassroots to government who have potential to figure more prominently in environmental justice efforts are presently under-resourced and over-worked.

ANALYSIS AND NEXT STEPS

Participants unanimously agreed that the most important outcome of the workshop was the sense that there is new momentum, including new contacts, created among participants specifically, and within the CPHA more generally toward addressing the environment as a priority area among the social determinants of health.

Workshop organizers committed to the preparation of this report, as well as the creation of a list of resources which can be housed with CNEHSE and built upon by its members as a 'go-to' point for academic papers, policy documents, and community reports relating to environmental justice and equity.

Participants also thought that collaboration among the NCC's (e.g. Environmental Health, Aboriginal Health, Determinants of Health) around themes of environment, health, and equity could be a useful way to increase attention to the issues identified during the workshop and potential resources for upcoming efforts to build national momentum and capacity on environmental justice in the public health community.

The upcoming summer short course being offered by COPEH-Can is another way to build capacity and create new intersectoral networks.

Results of the workshop are commensurate with the ongoing efforts of CNESHE to "promote research, policy, and community action toward healthy environments for all". CNEHSE priorities continue to include:

- 1) Acknowledge and address issues of power and power relations in interdisciplinary, intersectoral and collaborative projects;
- 2) Clarify definitions surrounding environmental equity in order to develop a common language that supports dialogue;
- 3) Work toward more inclusive partnerships and collaborations with a broad range of disciplines, individuals and sectors;
- 4) Broaden criteria for success for academics and professionals to encourage more collaborative projects that include community, policy makers and other practitioners;
- 5) Address challenges of time and scale in order to support more longer term, broad scale strategic research.

Readers are encouraged to visit the CNEHSE website at www.cnehse.ca to access more information and join the network.

Environmental Equity: Examples in Canadian Context

- Income
 - ability (or not) to respond / make choices
- First nations
 - Land base not moveable; community location contexts over generations
- Resource communities
 - Bearing inequitable environmental health burden even if benefitting economically; environmental health legacy may outlast the activity
- Vulnerable communities – eg kids, immuno-compromised, elderly
 - Standard setting issues of equity; lack of power, consent