

**THE ‘HEALTHY PARKS–HEALTHY PEOPLE’ MOVEMENT IN CANADA:  
PROGRESS, CHALLENGES, AND AN EMERGING KNOWLEDGE AND ACTION  
AGENDA**

**Supplemental Online Material: Evidence Gaps and Recommendations Brief**

Based on our review, we provide five key recommendations that can be used by the protected and conserved areas and health communities to mobilise knowledge production and coproduction for more effective action related to the growing Healthy Parks–Healthy People (HPPH) movement in Canada:

1. While the state of evidence on the health and well-being benefits of nature contact within parks in Canada is growing, it lags relative to the global evidence base. More work integrating traditional health methods including, but not limited to, experimental studies, longitudinal studies, life course approaches and random control trials is needed to better understand the impacts of nature-based interventions. Research that has focused on health and well-being outcomes in protected and conserved areas is mostly quantitative and focused on assessing behavioural effects from self-reported motivations and outcomes, often adopting inconsistent and uncomparable methods. More rigorous study designs and objective measures of both nature and mental health outcomes are needed to confirm statistically significant relationships (Tillmann et al., 2018; Hockings et al., 2020) including, but not limited to, how exposure and outcomes vary across seasons and life-stages, ethnic, cultural and racial background, and related health disparities. Virtually no studies have been conducted using qualitative research methods, such as ethnographic approaches or observation of free behaviour with links to health and well-being outcomes.
  
2. Research focused on equity-deserving groups, including but not limited to, Indigenous persons, Black persons, persons of colour, women, youth, persons with disabilities (PwD), resource poor, and members of the Lesbian, Gay, Bisexual, Transgender, Two-Spirited, Queer and Questioning (LGBT2Q+) communities remain critical research gaps within the HPPH domain. There is a need to examine the evidence called for above through a strong health equity lens, such as anti-racist and Ethical Space framings. It is important to note that much of

the current evidence base has been developed through a positivist lens and that a more inclusive research approach may allow for new insights through critical, decolonising and Indigenous methodologies (Smith, 2021). Engagements with the concept of Ethical Space in other health system contexts has revealed how Indigenous access to, and experiences in, healthcare settings can be improved and warrants thoughtful attention in future studies (see Nelson & Wilson, 2018).

3. Only a few organisations have activated HPHP programming (most notably Ontario Parks and BC Parks). Overall, activation of HPHP programmes remains limited across Canada. This is more likely the result of capacity issues within organisations than a lack of desire to implement such programming. Protected and conserved area organisations remain poorly (financially and human) resourced overall and especially with respect to personnel trained in the social and health sciences and other related disciplines (e.g. tourism and recreation) (e.g. Office of the Auditor General of Ontario, 2020). Federal and provincial governments should increase funding that links biodiversity protection to the health promoting programming explored in this review. The development of cross-sector education programmes and training protocols to address human health and well-being and related topics for all levels of park staff is required (Lemieux et al., 2016, 2012).
4. Publicly reported data and outcomes related to visitation and specific HPHP programming is somewhere between limited and non-existent. Only a few agencies, such as Ontario Parks and Parks Canada, include questions related to health and well-being outcomes in visitor satisfaction surveys; however, such surveys are often not at a level of detail that allows for issues of equity and inclusion to be readily assessed. Furthermore, results are generally not reported on publicly. Little is known about how specific HPHP programming, as well as *PaRx* programmes in British Columbia, Ontario, Manitoba and Saskatchewan, increase visitor health outcomes (James et al., 2019). Relatedly, reporting by governing organisations (such as ‘State of the Park’ reports) has focused almost exclusively on ecological aspects of planning and management (e.g. ecological integrity) and omits socio-economic and health dimensions, including health and well-being outcomes derived from visitation. This includes, for example, data on race and ethnicity and newcomer groups such as immigrants and refugees, as well as

economic impact evaluations of health outcomes derived from individual or systems of protected and conserved areas (e.g. savings to the healthcare system derived through visits). Alignment of indicators, joint metrics and reporting for health, biodiversity and programming is needed to enable effective work across organisations.

5. With some notable exceptions like *PaRx*, cross-sector integration remains limited in Canada. Strengthened inter-network collaboration of protected and conserved areas and health promotion sectors through capacity building and coproduction of knowledge development, implementation and evaluation is needed. There is also need for international and national guidance and best practices to support cross-sector integration of HPHP programming. At the international level, this guidance could be developed in collaboration with the IUCN World Commission on Protected Areas (WCPA) Health and Well-being Specialist Group and the UN World Health Organization (WHO). Joint collaborative working groups and governance arrangements at multiple scales are needed to put policy agendas into practice and foster implementation both within protected and conserved areas agencies and across other influencing sectors such as education and infrastructure. More centralised financial and structural support is required to encourage better integration across these sectors.

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