



CLIMATE CHANGE RESILIENCE PART 2: PUBLIC HEALTH ROLES AND ACTIONS



This document is one of two practice briefs that make the case for accelerated, equity-focused public health action to address the climate crisis. The first instalment explores equity-informed approaches for addressing climate change: *[Climate change resilience part 1: COVID-19 underscores the need to address inequity and transform systems](#)*.¹ This second instalment considers planetary health more broadly, builds on existing recommendations and identifies specific public health roles and actions for a just, sustainable future where everyone can thrive.

We welcome questions, comments and/or stories from the field at NCCDH@stfx.ca. For other NCCDH resources on climate change and health equity,² please click [here](#).

Prioritizing planetary health action

Contributing to the transition to a sustainable, just, and healthy future has become an integral part of the health sector's role—and responsibility.^{3(p61)}

This document is one of two practice briefs that, drawing on peer-reviewed and grey literature, make the case for accelerated, equity-focused action to address planetary health, with a focus on the climate crisis.

Scientists have rightly framed the climate crisis as the defining issue of our time.⁴⁻¹⁰ Global heating and environmental degradation (e.g., industrial waste, deforestation, loss of biodiversity) are already impacting human health, and future projections are dire.^{4,5,10,11} Indeed, the very planetary systems that sustain life on earth are in jeopardy. It is well recognized that the climate crisis, as well as many other processes that compromise the natural environment, exacerbate existing inequities and disproportionately affect those from Indigenous, racialized and low-income communities; women; and those who experience disability.¹²⁻¹⁶

What is less readily acknowledged is how colonial and racist systems have harmed planetary health and have played a significant role in driving the climate crisis. To better understand this, one need only draw connections between the current state of the physical environment and the ongoing history of colonialism and structural racism. The forced relocation of Indigenous communities, the removal of Indigenous children to residential schools and the erasure of traditional knowledge

that has taken place over generations; the extent to which the rise in Canadian industrial processes relied on labour from Black, Indigenous and Asian workers; and the intentional and continued efforts to locate toxic environmental waste near Black and Indigenous communities are deeply implicated in driving global heating and harming the planet.

To strengthen our collective resilience and reduce further health inequities, urgent action is needed.

This action must:

1. prevent further environmental degradation and the release of emissions that cause catastrophic levels of global heating; and
2. address the unjust systems (e.g., racism and colonialism) that contribute to planetary harm, including the climate crisis.

Although the World Health Organization has yet to declare the climate crisis as a public health emergency, Canadian health organizations have made statements that recognize the urgency for action.^{10,11,12,17} Public health actors are engaged in some promising activities as they:

- assess and report on the health impacts of the crisis (e.g., climate change health and vulnerability assessments, health impact assessments, surveillance on heat-related deaths);
- inform municipal environmental assessments and resilience plans;
- participate in advocacy and policy development at multiple levels to address the crisis as an urgent health issue;

- collaborate to design and implement various activities (e.g., efforts to increase neighbourhood greening, reduce air pollution, respond to extreme heat, communicate the health impacts of the crisis and support people experiencing eco-anxiety and grief);
- convene knowledge exchange activities on public health action to address the climate crisis; and
- contribute to the evidence base with related research and evidence-informed resources.

These activities have, to varying extents, considered the significant health equity impacts of environmental crises, including the importance of disrupting oppressive systems such as racism and colonialism. However, as validated by multiple calls for action and policy recommendations, a great deal of work remains. Within this work, there is incredible opportunity for public health, in collaboration with other sectors, to transform systems and build resilience.^{1,3,10–13,17,18} In other words, there is space for public health actors to play a courageous and innovative role to both avoid climate catastrophe and ecological collapse and bring about a just and sustainable future.

RELATED RESOURCES

- *Climate change and human health: Position statement* (2019)¹⁷
- “Responding to climate change as public health professionals” (2020)¹⁸
- *Tools and methods for integrating health into climate change adaptation and mitigation policies and strategies* (2021)¹⁹

Tackling social injustice is a key part of building resilience

Colonialism has altered the ecological systems that support Indigenous peoples’ health, economies, cultural practices and self-determination. For First Nations, Métis and Inuit communities, the current climate crisis is understood and experienced as an intensification of the environmental changes imposed on Indigenous people by historic and ongoing colonial processes. Their remarkable and demonstrable resilience through these changes, however, reinforce the opportunity for learning and collaborating on solutions that draw on the ecological traditional knowledge, social and environmental adaptability of Indigenous peoples in Canada.^{11(p2)}

To truly build resilience, public health actors need to prevent further environmental degradation, mitigate the extent of the climate crisis and tackle social injustice. This means engaging in anti-racist, decolonized, equity-focused planetary health action as they:

- collaborate across sectors to promote racial equity and Indigenous self-determination;^{13,20–22}
- value and apply knowledge from those who are often on the front lines of the climate crisis yet whose perspectives are typically excluded (e.g., from those who are Indigenous, racialized, disabled); and

- advocate to minimize environmental degradation and greenhouse gas emissions by addressing:
 - ◇ the extent of global warming that takes place overall and, by extension,
 - » the health impacts of climate change incurred by everyone and
 - » the disproportionate health impacts of climate change on Black and Indigenous communities who are disproportionately exposed to air pollution at home and at work;^{11,23-25} and
 - ◇ the environmental racism responsible for locating Black and Indigenous communities near industrial waste sites.^{25,26}

RELATED RESOURCES

- [NCCDH resources: Climate change and health equity](#)(2017-)²
- [Decolonizing climate policy in Canada](#) (2021)¹³
- [“Canada’s big chances to address environmental racism”](#) (2020)²⁵

Public health roles and actions for equitable and resilient communities

Climate change is the biggest global health threat of the 21st century.... A new advocacy and public health movement is needed urgently to bring together governments, international agencies, non-governmental organisations (NGOs), communities, and academics from all disciplines to adapt to the effects of climate change on health. Any adaptation should sit alongside the need for primary mitigation: reduction in greenhouse gas emissions, and the need to increase carbon biosequestration through reforestation and improved agricultural practices. The recognition by governments and electorates that climate change has enormous health implications should assist the advocacy and political change needed to tackle both mitigation and adaptation.^{27(p1693)}



The table below adapts the NCCDH’s *Common agenda for public health action on health equity*²⁸ to addressing planetary health, including the climate crisis. Integrating existing recommendations, three main pathways are proposed for building equitable and resilient communities:



BUILD A FOUNDATION FOR ANTI-RACIST, DECOLONIZED AND EQUITY-FOCUSED ACTION TO PROMOTE PLANETARY HEALTH.



ESTABLISH AND USE A STRONG KNOWLEDGE BASE TO ADDRESS THE CLIMATE CRISIS AND HEALTH EQUITY.



COLLABORATE WITH NON-HEALTH SECTOR PARTNERS TO BOTH AVOID CATASTROPHIC LEVELS OF GLOBAL HEATING AND ADDRESS SYSTEMIC INEQUITY.

The public health roles and actions outlined above are not intended to be comprehensive. Rather, they are intended to spark discussion about how public health can mobilize to address social injustice, the climate crisis and environmental degradation.

TABLE 1: PUBLIC HEALTH ROLES AND ACTIONS FOR EQUITABLE, RESILIENT COMMUNITIES

Pathways for building equitable, climate-resilient communities	Examples of evidence-informed actions
1 BUILD A FOUNDATION FOR ANTI-RACIST, DECOLONIZED AND EQUITY-FOCUSED ACTION TO PROMOTE PLANETARY HEALTH.	
a) Strengthen public health leadership	<ul style="list-style-type: none"> Elevate the voices of practitioners, researchers, Indigenous leaders and representatives of communities who call for public health to not only “do more” but to “do differently” to minimize further global heating and promote environmental justice.^{1, 3, 10, 11, 14, 17, 18, 20, 25, 26, 29–34}
b) Increase social and political support and action	<ul style="list-style-type: none"> Engage in a variety of strategies to build support to address the health and health equity impacts of the climate crisis and environmental degradation (e.g., social movements, storytelling, public narrative, media advocacy, communications campaigns).^{35–39} Use language that <ul style="list-style-type: none"> frames climate change and environmental degradation as public health problems; explains the oppressive systems that drive vulnerability to these problems (e.g., racism, colonialism);^{40, 41} communicates risk rather than uncertainty and expresses the need for urgent action (e.g., “climate crisis” vs. “climate change”).^{42–45}
c) Build organizational and system capacity	<ul style="list-style-type: none"> Provide foundational learning for public health students to: <ul style="list-style-type: none"> understand complexity and systems change, and the interconnections between the structural, social and ecological determinants of health; generate collaborative solutions; support Indigenous-led climate action; and transform systems for resilience.^{3, 10, 12, 13, 46–48} Invest in system resilience to respond sufficiently to the planetary health crisis; maintain core functions during times of stress (e.g., extreme weather events); and ensure social protections for all, particularly those who are most marginalized.^{46, 49–51} Develop equity-focused oaths, value statements, competencies and organizational standards related to climate change and health.^{3, 52, 53} Implement networked, dedicated positions at local and regional levels to coordinate efforts to build resilience and address climate change.

2 ESTABLISH AND USE A STRONG KNOWLEDGE BASE TO ADDRESS THE CLIMATE CRISIS AND HEALTH EQUITY.	
a) Act on existing evidence and strengthen the knowledge base to support concerted action	<ul style="list-style-type: none"> Consider multiple forms of equity (e.g., racial equity, gender equity, disability justice) when working across sectors to design activities that minimize greenhouse gas emissions and promote climate adaptation.^{12-16, 20-22,25,26,41} Dedicate resources to communities that experience systemic oppression and that will benefit the most (e.g., in calls for project proposals, use explicit language indicating that applications from such communities will be prioritized).⁴¹ Act on existing evidence that shows Black and Indigenous communities are disproportionately exposed to environmental health impacts, including air pollution and hazardous industrial waste.^{11-13,23-26} Contribute to the evidence base on interventions that reduce inequitable exposures to climate impacts and on equity-focused responses to the climate crisis.^{32,34,54} Knowledge gaps^{20-22,32,46,50,55,56} include the following: <ul style="list-style-type: none"> » How impacts of the climate crisis exacerbate “colonial-rooted inequalities that Indigenous women have historically experienced”^{55(p899)} » How to build environments where everyone can thrive.^{46,50} » How to avoid increasing inequity due to environmental gentrification^{46,50} » How to use social connectedness as an intervention for climate adaptation⁵⁶
b) Incorporate equity considerations into regular monitoring, surveillance and reporting	<ul style="list-style-type: none"> Conduct climate change and health vulnerability assessments: <ul style="list-style-type: none"> » Embed health equity as a driving value from the beginning.⁵³ » Engage with Indigenous and other racialized communities as partners and sources of expertise.^{12,13,20,25,41,47,55,57,58} » Within public health units/regional health authorities, seek input from health equity-focused staff. For surveillance activities related to the health impacts of the climate crisis, build on what we have learned about the importance of collecting sociodemographic data during COVID-19.^{59,60}
3 COLLABORATE WITH NON-HEALTH SECTOR PARTNERS TO BOTH AVOID CATASTROPHIC LEVELS OF GLOBAL HEATING AND ADDRESS SYSTEMIC INEQUITY.	
a) Participate in long-term, multisectoral action	<ul style="list-style-type: none"> Join forces with others working to avoid catastrophic levels of global heating and build social equity (e.g., Indigenous leaders, environmental advocates, city leaders working on climate resilience, emergency preparedness sector, faith groups). Ask “What investments can be made in communities so that people and systems are more able to adapt to, and bounce forward from, future climate impacts?”^{3,10-14,20,25,28-31,38,39,46,47,49,50,55,61,62} Contribute to municipal and regional plans for climate adaptation and resilience.⁶³
b) Advocate for policy and structural change	<ul style="list-style-type: none"> Participate in policy processes to address the climate crisis and advance health equity.^{17,18,28-30,39,41,64-67} When participating in policy processes and writing documents such as position statements and policy briefs, use explicit language to: <ul style="list-style-type: none"> » recognize the climate crisis and environmental degradation as Indigenous rights issues^{12,13}; » propose actions to address the interconnected systems (e.g., racism, colonialism, economic structures) that drive environmental racism and climate-related vulnerability^{40,41}; and » indicate the multiple benefits of proposed policies (environmental, health, social equity).⁴¹ Take a health-in-all-policies approach⁶⁸ to addressing the health impacts of the climate crisis and environmental degradation.^{11,25,69-71}
c) Allocate time and resources for meaningful, sustained community engagement and political empowerment	<ul style="list-style-type: none"> Support front-line staff to spend the time needed to meaningfully engage with communities (e.g., develop collaborative governance models for shared decision-making and community-led resilience activities).^{61,72-74} Value Indigenous expertise in decreasing the current rate of catastrophic global heating and adapting to a rapidly changing environment.^{12,13,55,75} Support Indigenous-led solutions for Indigenous communities.^{12,13} Ensure Indigenous and racialized voices are actively included and valued in climate resilience and adaptation plans.^{55,75}

The need to do, do more and do differently to build resilience

If public health is to play a role in this seismic shift, it must relinquish its propensity to be the handmaiden of the status quo through strategies of risk management, the primary effect of which is to manage the fall-out of conventional systems while failing to question the deeply problematic and unsustainable nature of these systems, and instead learn how to midwife the transition by partnering with unusual allies (civil society, social movement, and Indigenous groups) in pressing for transformative change.^{20(p903)}

Across Canada, public health engagement in fighting the climate crisis is uneven, with some local health authorities and public health associations showing leadership in addressing climate change and others remaining largely unengaged. The same is true of many other intersecting structural determinants such as racism and colonialism. These structural determinants of health drive inequitable conditions of daily life and are inextricably linked to climate change vulnerability. Yet, up until recently, such oppressive systems have received limited attention from the Canadian public health community.

In order for Canadian public health actors to truly build resilience, they must be willing to (a) understand how oppressive systems such as racism and colonialism are implicated in planetary harm and in the climate crisis,⁴⁸ (b) engage in disrupting these systems and (c) actively value and partner with those who are already engaged in social justice work — particularly those who are advocating against environmental racism and working to decolonize climate policy.

Finally, system-level investments for addressing global heating and environmental degradation must be commensurate with the urgency of the planetary health crisis. During the historic fight against tobacco use, Canadians invested in multifaceted population-level interventions, including supportive legislation and dedicated programs, positions and networks for tobacco control-related learning and action. Reflecting on these efforts begs two key questions:

1. How much of a priority is avoiding climate catastrophe and ecological collapse?
2. And how much will the Canadian public health community invest in doing, doing more and doing differently to bring about a just and sustainable future?

RELATED RESOURCES FOR EQUITY-FOCUSED CLIMATE ACTION

- *Sustainable health equity: Achieving a net-zero UK* (2020)⁷¹
- *Benefits of actions to reduce greenhouse gas emissions in Toronto: Health and health equity* (2019)⁷⁶
- *Climate action through equity: The integration of equity in the Portland/Multnomah County 2015 climate action plan* (2016)⁷⁷

Tell us what you think!

To send us your feedback and stories, and to explore collaborative opportunities to support equity-focused public health action on climate change, please write us at nccdhd@stfx.ca or tweet us @NCCDH_CCNDS.

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