



**Formal Submission to the Government of Canada  
National Adaptation Strategy Public Engagement Process**

**July 2022**

## About Us

The Canadian Association of Physicians for the Environment (CAPE) is a national physician-led organization working at the intersection of health and environment. CAPE encourages policy-makers to adopt a planetary health lens in their decision-making.

## Introduction

CAPE appreciates the opportunity to engage with the Government of Canada in the development of a National Adaptation Strategy (NAS). CAPE staff and board members have participated in the Health and Wellness Advisory Table and the Disaster Resilience and Security Advisory Table. CAPE has also worked closely with the Insurance Bureau of Canada through the Climate Proof Canada Coalition to provide advice and input on the NAS to Minister Guilbeault and his staff.

CAPE physicians are already seeing the impacts of climate change on their patients. For example, Vancouver family physician Dr. Melissa Lem notes that, early in the pandemic, she expected an increase in calls and visits from her patients for mental health concerns. However, the only time she has seen a significant rise in depression and anxiety was during the summertime when wildfires filled the skies with smoke and people no longer felt safe inside or outside.

Another family physician, Dr. Samantha Green, based in Toronto, says that there is one patient that always comes to mind when people ask her about the heat. She says, “This patient is older, in his 60s, and has asthma. He has some kids who live out in the suburbs, and they’re really not very close. He didn’t have an air conditioner for a long time...[and] for several years in a row, every summer, I would worry that he would die alone in his hot apartment during an extreme heat alert—not having access to adequate cooling facilities, maybe with an asthma exacerbation. And no one would know.”

Emergency physician Dr. Courtney Howard in Yellowknife noticed an increase in patients presenting with asthma during the extreme wildfire summer of 2014. She subsequently led a study published<sup>1</sup> in the British Medical Journal Open demonstrating that the ER saw a full doubling of patient visits for asthma as compared to surrounding years, and that the summer led people to feel disconnected from the land and anxious about what climate change would mean for their children. Another strong theme of the study was that the people who prepared the most felt empowered and proud. It is in the spirit of both the mental and physical health benefits of preparation that this submission is written.

---

<sup>1</sup> See <https://bmjopen.bmj.com/content/11/2/e037029> and <https://pubmed.ncbi.nlm.nih.gov/29981098/>.

## Recommendations for the NAS

In order to protect the physical and mental health of people living in Canada in the face of climate change, CAPE recommends that the NAS address the following:

### 1. Inequalities and Vulnerabilities

*Climate change impacts worsen existing inequalities and vulnerabilities and multiply existing hazards – meaning that some people living in Canada are more at risk or more exposed.*

*–Canada’s National Adaptation Strategy Discussion Paper, May 2022*

While the impacts of droughts, storms, and floods are primarily to infrastructure and mental health, the impact of extreme heat is primarily to physical health. Furthermore, the impacts of extreme heat events are inequitable, and disproportionately affect those most vulnerable including those who are living in poverty, those living in thermal insecure buildings, those living in neighborhoods—often racialized and economically deprived—with low neighbourhood greenness, those experiencing social isolation, those experiencing homelessness, those who work outdoors or in hot indoor environments, as well as older individuals and women.<sup>2</sup> Adaptation solutions to extreme heat events must target immediate risk reduction to these more vulnerable populations as well as longer-term risk reduction to prevent serious outcomes from future extreme heat events.

### 2. Mental Health Impacts

*Climate change affects mental health, leading to increased anxiety, depression, Post Traumatic Stress Disorder and/or ecological grief. It also affects cultural identities through loss of access or connection to places, practices and traditions. The mental health impacts of lost access to land, sites, practices or traditional food sources can be significant.*

*–Canada’s National Adaptation Strategy Discussion Paper, May 2022*

The Government of Canada is already considering the mental health impacts of climate change. However, when the word “health” is used, it is commonly understood among the general public and non-medical professionals to refer to physical health, not mental health. CAPE recommends that the National Adaptation Strategy reinforce the mental health impacts of climate change by replacing the term “health” with “physical and mental health” and ensuring that the mental health impacts are adequately addressed.

Additionally, we encourage the Government of Canada to consider the mental health benefits of involving the population in adaptation efforts. Recognizing that disasters by definition overwhelm systems, it will be important to ensure a well-briefed population that has the tools

---

<sup>2</sup> See

[https://journals.lww.com/environepidem/Fulltext/2022/02000/Analysis\\_of\\_community\\_deaths\\_during\\_the.8.aspx1](https://journals.lww.com/environepidem/Fulltext/2022/02000/Analysis_of_community_deaths_during_the.8.aspx1)

required to help themselves and their neighbours in the coming crises. Work to create networks of involved community members and volunteers is likely to have not only practical benefits but also empower community members and have a positive effects on mental health.

### 3. Health System Impacts

*Climate change is ... placing additional stress and increasing costs on the health system.*  
–Canada’s National Adaptation Strategy Discussion Paper, May 2022

While the NAS discussion paper mentions the impacts of climate change on the health system at a high level, more detailed analysis is needed. Not only will climate change place increasing pressure on the health system due to increasing physical and mental health impacts, but health systems and infrastructure are also at risk during extreme weather events. Loss of power and access to clean water at hospitable and clinics, the risk of hospital evacuations (as happened during the 2017 forest fires in Fort McMurray), and the loss of access to primary care physicians during extreme weather events put patients at risk. Special attention should be given to hospitals and other health infrastructure as anchor institutions within communities, built or retrofitted to withstand climate impacts and also to provide safe havens for people during extreme weather events, even if they don’t require health services for acute physical or mental health conditions.

### 4. Nature

*Climate change is affecting the resilience of Canada’s ecosystems and causing impacts to the biodiversity they support and the services they provide.*  
–Canada’s National Adaptation Strategy Discussion Paper, May 2022

While it is important to protect nature so that nature protects us, it is just as important (or even more so) to protect nature as valuable in its own right. CAPE recommends that the protection of nature in its own right be at the forefront of the National Adaptation Strategy, while ensuring that Indigenous peoples, organizations, and communities are able to exercise self-determination on their lands and territories.

### 5. Outcomes and Targets

*In order to reach our ambitious goals, we need to take action now. The National Adaptation Strategy will outline priority actions to meet Canada’s objectives and address challenges across systems. Accompanying action plans will outline responsibilities, resources, and targets for the first five years.*  
–Canada’s National Adaptation Strategy Discussion Paper, May 2022

CAPE agrees that immediate actions are needed to adapt to the impacts of climate change. However, actions that are not nested within a framework of desired outcomes may mean that investments, energy, and efforts are focused in the wrong place. “Outcomes” are defined as the

expected societal change that an intervention (or “action”) will achieve. Outcomes are important for measuring success and for accountability; the NAS should include them. Furthermore, targets should be included in the National Adaptation Strategy and not deferred to “accompanying action plans”.

## 6. Co-benefits of Natural Infrastructure

The importance of co-benefits of natural infrastructure cannot be overstated. Natural infrastructure includes protecting nature and protecting and expanding green space and tree canopy in urban spaces. Natural infrastructure can be used to reduce the impacts of extreme heat events, flooding, storm surges, and other climate-related events. The BC Centre for Disease Control’s review<sup>3</sup> of heat deaths in BC in the summer of 2021 noted that increasing green space and shading, especially in neighbourhoods high on the material deprivation index, would provide naturally cooler areas where people can find respite from extreme heat events. Natural infrastructure is often less expensive than gray or “hard” infrastructure solutions, and more resilient. Co-benefits include improved physical and mental health and well-being, cleaner air and water due to improved ecosystem services, and sequestration of greenhouse gasses.

### Contact:

Raissa Marks, Interim Executive Director

Tel: (647) 952-4525

Email: [info@cape.ca](mailto:info@cape.ca)

Web: [www.cape.ca](http://www.cape.ca)

---

<sup>3</sup> See [https://www2.gov.bc.ca/assets/gov/birth-adoption-death-marriage-and-divorce/deaths/coroners-service/death-review-panel/extreme\\_heat\\_death\\_review\\_panel\\_report.pdf](https://www2.gov.bc.ca/assets/gov/birth-adoption-death-marriage-and-divorce/deaths/coroners-service/death-review-panel/extreme_heat_death_review_panel_report.pdf)