



# Guide to Integrating Planetary Health in Family Medicine Training

Developed by Residents for Residents

Every year, residents from family medicine residency programs representing every medical school in the country select a topic they believe warrants development and improvement in family medicine training. Typically, the **Guide for Improvement of Family Medicine Training (GIFT)** provides recommendations to family residency programs for enhancing current aspects of the curriculum. Exceptionally, GIFT 2020 addresses climate change and planetary health in family medicine education while also offering a conceptual framework for residents and practitioners alike.

## Climate change and health

The World Health Organization declared climate change “the greatest threat to global health in the 21st century”.<sup>1</sup> Rising temperatures in Canada are leading to increasing floods, droughts, heatwaves, and wildfires.<sup>2</sup> Studies reveal that these environmental changes are having negative health impacts on people living in Canada. For instance, both extreme heat and air pollution have been found to increase the risk of cardiovascular morbidity and mortality.<sup>3</sup> There are also reports of post-traumatic stress disorders and other mental health disorders related to extreme weather events.<sup>4</sup> Furthermore, there is a shift in the geographical distribution of Lyme disease, putting a greater population at risk.<sup>5</sup> These are only a few examples of the impact that the changing climate has on human health, supporting the growing evidence that health care professionals need training in planetary health.

## Climate change and the role of family physicians

The health care sector is responsible for five per cent of Canada’s carbon emissions.<sup>6</sup> Family physicians represent close to half of the medical workforce and are found in almost every clinical and nonclinical setting. Family physicians should be aware of their individual and collective carbon footprint, and integrate low carbon policies into clinic practices. They should also be aware of climate science and increase their capacity to recognize the impact of climate change on the communities they care for. This knowledge should be paired with specific communication skills to efficiently advise patients on minimizing the risks that climate change poses to their health.<sup>7,8</sup>

## Addressing planetary health in family medicine postgraduate education

According to our surveys and focus groups conducted among residents and program directors, planetary health—including climate change—is not systematically found in family medicine curricula across Canada. Overall, residents report very little exposure to the topic, and some program directors feel unprepared to deliver related academic content. As such, this guide contains a conceptual framework to address planetary health in family medicine and recommendations to help departments of family medicine develop their climate-oriented policies and curricula.

# A Conceptual Framework for Integrating Planetary Health in Family Medicine



## Planetary health advocacy

- Gaining awareness of local, regional, and national environmental policies and their impact on vulnerable patients and marginalized communities
- Exploring avenues, partnerships, and tools for equity-based advocacy

## Environmental health literacy



- Learning about the consequences of planetary changes on human health
- Understanding the health impacts of climate-related events on communities



## Patient empowerment

- Educating patients about co-benefits of sustainable lifestyles
- Educating vulnerable patients about preventive measures during extreme weather events



## Sustainable practice



- Adopting low-carbon practice management measures
- Using quality improvement principles to minimize redundancies and waste

## Recommendations

- Every department of family medicine should have at least one planetary health faculty lead who addresses climate change and health within curricula, and supports the department for advancing planetary health initiatives
- Each family medicine program should develop its own climate-related curriculum and incorporate climate change and human health in existing academic and clinical activities
- The curricula should highlight the following concepts:
  - Teaching family medicine residents about change, its anthropogenic causes and impacts on human health, focusing on increasing environmental literacy among learners
  - Offering practical solutions to reduce family physicians' carbon footprint in any clinical setting and participate in climate change mitigation and adaptation
  - Providing ways for residents to efficiently engage in patient education regarding the co-benefits of environmental sustainability and health
  - Equipping residents with tools to participate in community-centred advocacy for mitigation and adaptation to the climate crisis

## Useful resources

- Health Canada. Climate change and health: Health effects website  
<https://www.canada.ca/en/health-canada/services/climate-change-health.html>
- The Canadian Coalition for Green Health Care website  
<https://greenhealthcare.ca/>
- *Climate Change Toolkit for Health Professionals*  
<https://cape.ca/wp-content/uploads/2019/05/Climate-Change-Toolkit-for-Health-Professionals-Updated-April-2019-2.pdf>
- Les Changements Climatiques – Un Abrégé à l’Intention des Professionnels de la Santé  
[https://www.inspq.qc.ca/publications/2777?fbclid=IwAR3L6pF\\_ul4JfBQnVPcIf03ZcH8zfkek-et7PN3hD\\_r\\_77xJp3rdm5aZ-Kc](https://www.inspq.qc.ca/publications/2777?fbclid=IwAR3L6pF_ul4JfBQnVPcIf03ZcH8zfkek-et7PN3hD_r_77xJp3rdm5aZ-Kc)

## Acknowledgements

This document was created by Dr. Aimée Bouka with contributions from Dr. Philip Bélanger, Dr. Ariane Thibault, and Dr. Zia Saleh on behalf of the CFPC’s Section of Residents Council (2019–2021). The team would like to thank Dr. Jean Zigby and Dr. Alex Mitcham for their invaluable feedback, as well as the review and feedback provided by the CFPC Environmental Health Resource Group. Special acknowledgements go to Dr. Ivy Oandasan and Tanya Czyzewski from the Education Department, who offered administrative and research support for GIFT 2020.

© 2021 The College of Family Physicians of Canada

All rights reserved. This material may be reproduced in full for educational, personal, and non-commercial use only, with attribution provided according to the citation information below. For all other uses, permission must be acquired from the College of Family Physicians of Canada.

### How to cite this document:

Bouka A, Bélanger P, Thibault A, Saleh Z. *Guide to integrating planetary health in family medicine training*. Mississauga, ON: College of Family Physicians of Canada; 2021.

---

## Endnotes

1. World Health Organization. <https://www.who.int/news/item/06-10-2015-who-calls-for-urgent-action-to-protect-health-from-climate-change-sign-the-call>. Accessed May 21, 2021.
2. Climate Action Network. Impacts in Canada web page. 2020. <https://climateactionnetwork.ca/issues/impacts-and-adaptation/learning-centre/impacts-in-canada/>. Accessed May 21, 2021.
3. Peters A, Schneider A. Cardiovascular risks of climate change. *Nat Rev Cardiol*. 2021;18(1):1-2.
4. American Psychiatric Association. How Extreme Weather Events Affect Mental Health website. 2019. <https://www.psychiatry.org/patients-families/climate-change-and-mental-health-connections/affects-on-mental-health>. Accessed May 21, 2021.
5. Ogden NH, Lindsay LR, Morshed M, Sockett PN, Artsob H. The emergence of Lyme disease in Canada. *CMAJ*. 2009;180(12):1221-1224.
6. Eckelman MJ, Sherman JD, MacNeill AJ. Life cycle environmental emissions and health damages from the Canadian healthcare system: An economic-environmental-epidemiological analysis. *PLoS Med*. 2018;15(7):e1002623.
7. Wellbery CE. Climate Change Health Impacts: A Role for the Family Physician. *Am Fam Physician*. 2019;100(10):602-603.
8. Abelson A, Rachlis V, Vakili C. Climate change: should family physicians and family medicine organizations pay attention? *Can Fam Physician*. 2013;59(5): 462-466.