



Climate Change: A Growing Concern for Patients and Physicians

PANELISTS

Dr. Samantha Green • Dr. Myles Sergeant • Dr. Marina Abdel Malak

WITH

Dr. Carrie Bernard • Dr. Nikki Bozinoff



Family & Community Medicine
UNIVERSITY OF TORONTO

**Mental Health
and Addictions**

March 26, 2025

Practising Well: Your Community of Practice



Please introduce yourself in the chat!

Your name,
Your community,
Your twitter handle



@OntarioCollege
#PractisingWell



Your Panelists: Disclosures

Dr. Samantha Green

Relationships with financial sponsors (including honoraria):

- OCFP Practising Well CoP speaker

Dr. Dr. Marina Abdel Malak

Relationships with financial sponsors (including honoraria):

- OCFP Practising Well CoP speaker
- OCFP Peer Connect Mentor

Dr. Myles Sergeant

Relationships with financial sponsors (including honoraria):

- Lecture honoraria: McMaster University, York University, University of British Columbia, Royal Botanical Gardens
- OCFP Practising Well CoP speaker

Funded grants, research, or clinical trials

- Executive Director of Canadian Coalition for Green Health Care, which received money from Natural Resources Canada for a Zero EV project.

All other investments or relationships

- PEACH Health Ontario, Co-director
- Canadian Coalition for Green Health Care, Executive Director
- Sustainable Healthcare at McMaster, PGME lead
- Hamilton Family Health Team, Medical Lead - Green Initiative
- Trees for Hamilton, President



Disclosures

Dr. Nikki Bozinoff @NikkiBozinoff

Relationships with financial sponsors (including honoraria):

- Ontario College of Family Physicians – Practising Well Implementation Group Member, CoP Speaker
- CAMH
- Department of Family and Community Medicine (University of Toronto)
- National Institute on Drug Abuse
- Womenmind
- CIHR
- Academic Health Sciences Alternate Payment Plan

Dr. Carrie Bernard

Relationships with financial sponsors (including honoraria):

- OCFP– Practising Well Scientific Planning Committee
- OCFP – Practising Well CoP Speaker
- University of Toronto – Stipend to supervise learners (students and residents) for the Department of Family and Community Medicine
- University of Toronto – Stipend for role in the Division of Mental Health and Addictions
- McMaster University –Stipend to supervise residents
- College of Family Physicians of Canada – Board Member



Disclosure of Financial Support

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Potential for conflict(s) of interest:

N/A

Mitigating Potential Bias

- The Scientific Planning Committee (SPC) has control over the choice of topics and speakers.
- Content has been developed according to the standards and expectations of the Mainpro+ certification program.
- The program content was reviewed by the SPC.

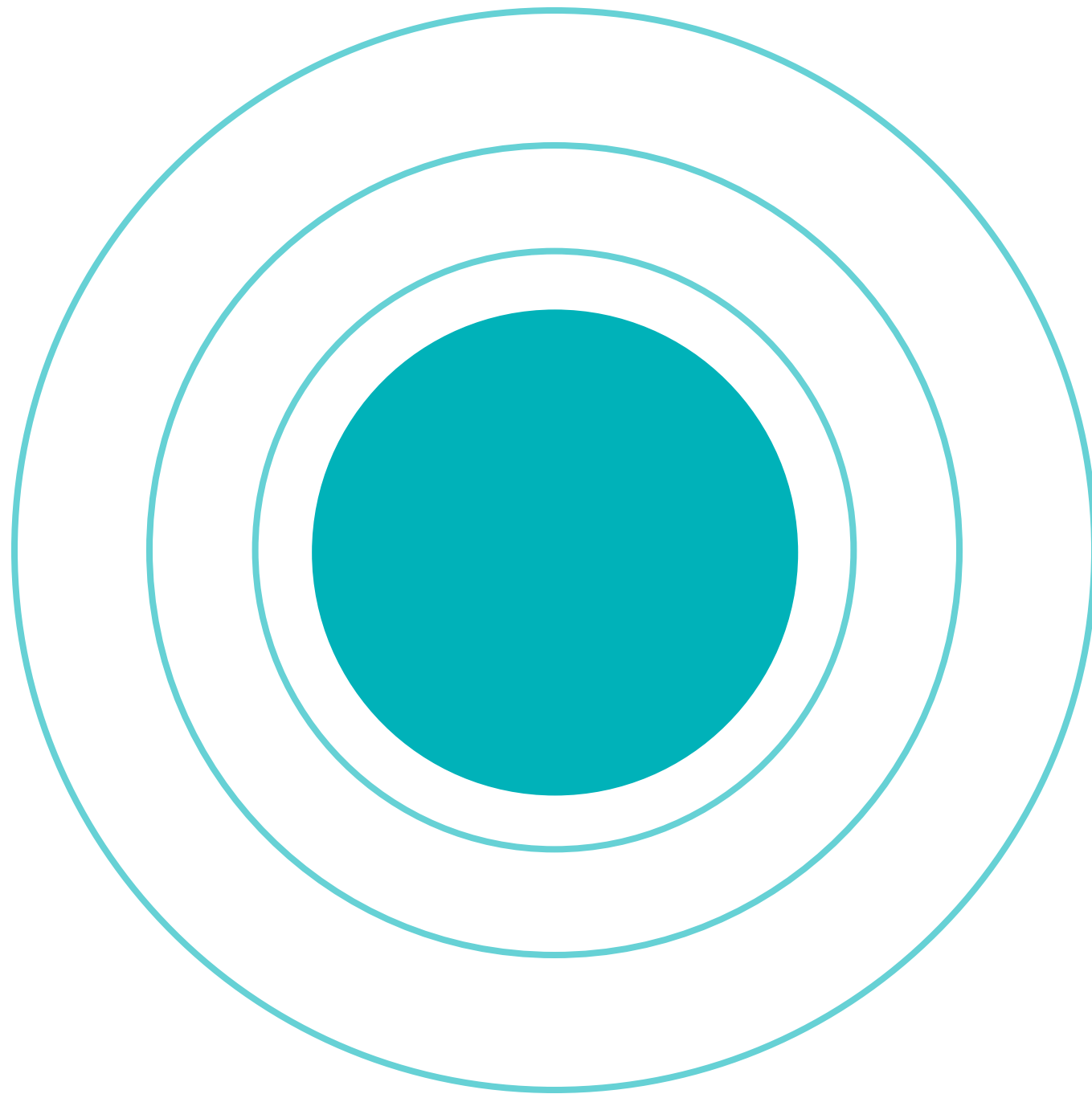


Land Acknowledgement

We acknowledge that the lands on which we are hosting this meeting include the traditional territories of many nations.

The OCFP and DFCM recognizes that the many injustices experienced by the Indigenous Peoples of what we now call Canada continue to affect their health and well-being. The OCFP and DFCM respects that Indigenous people have rich cultural and traditional practices that have been known to improve health outcomes.

I invite all of us to reflect on the territories you are calling in from as we commit ourselves to gaining knowledge; forging a new, culturally safe relationship; and contributing to reconciliation.





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Your Panelists

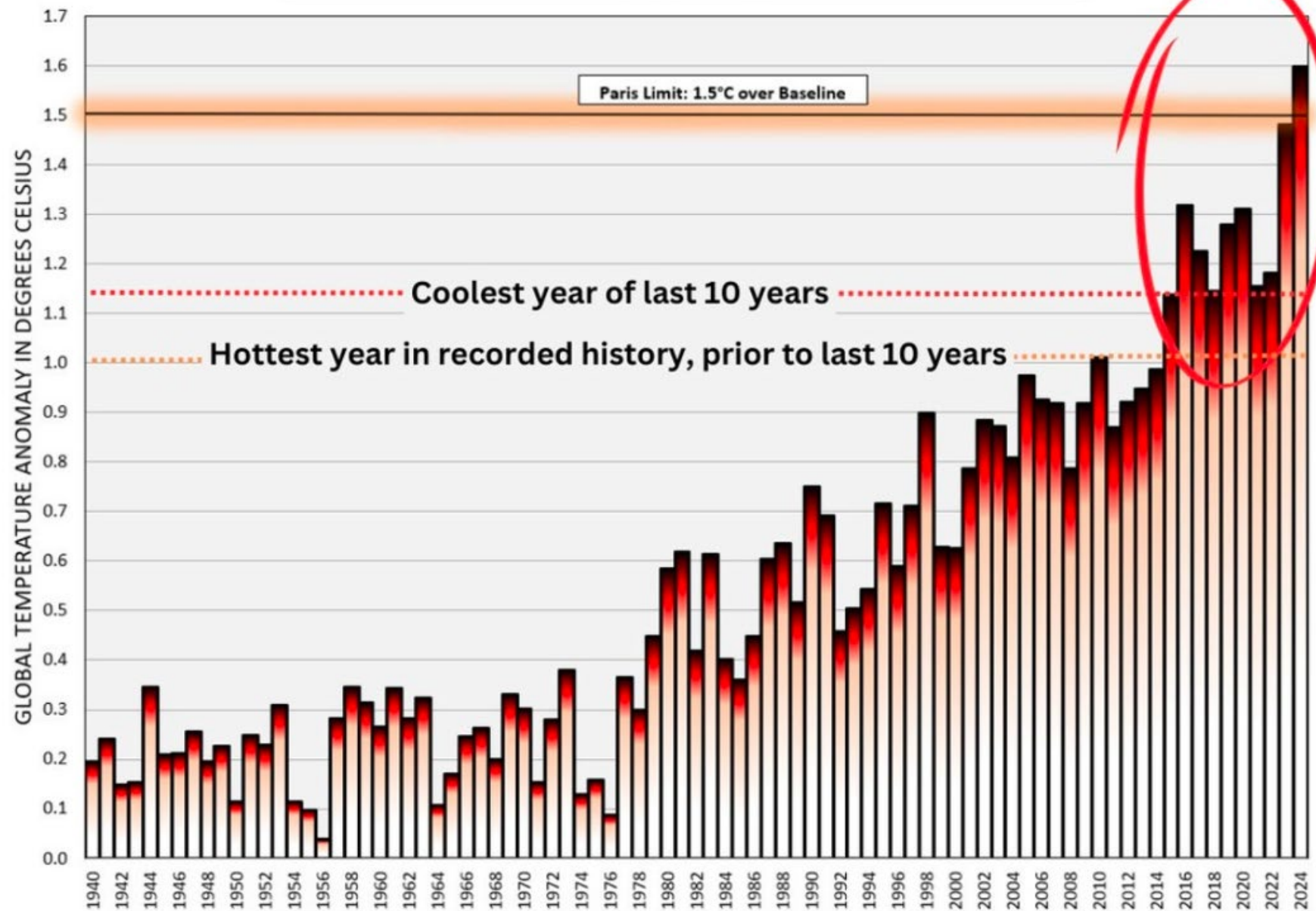
Dr. Samantha Green

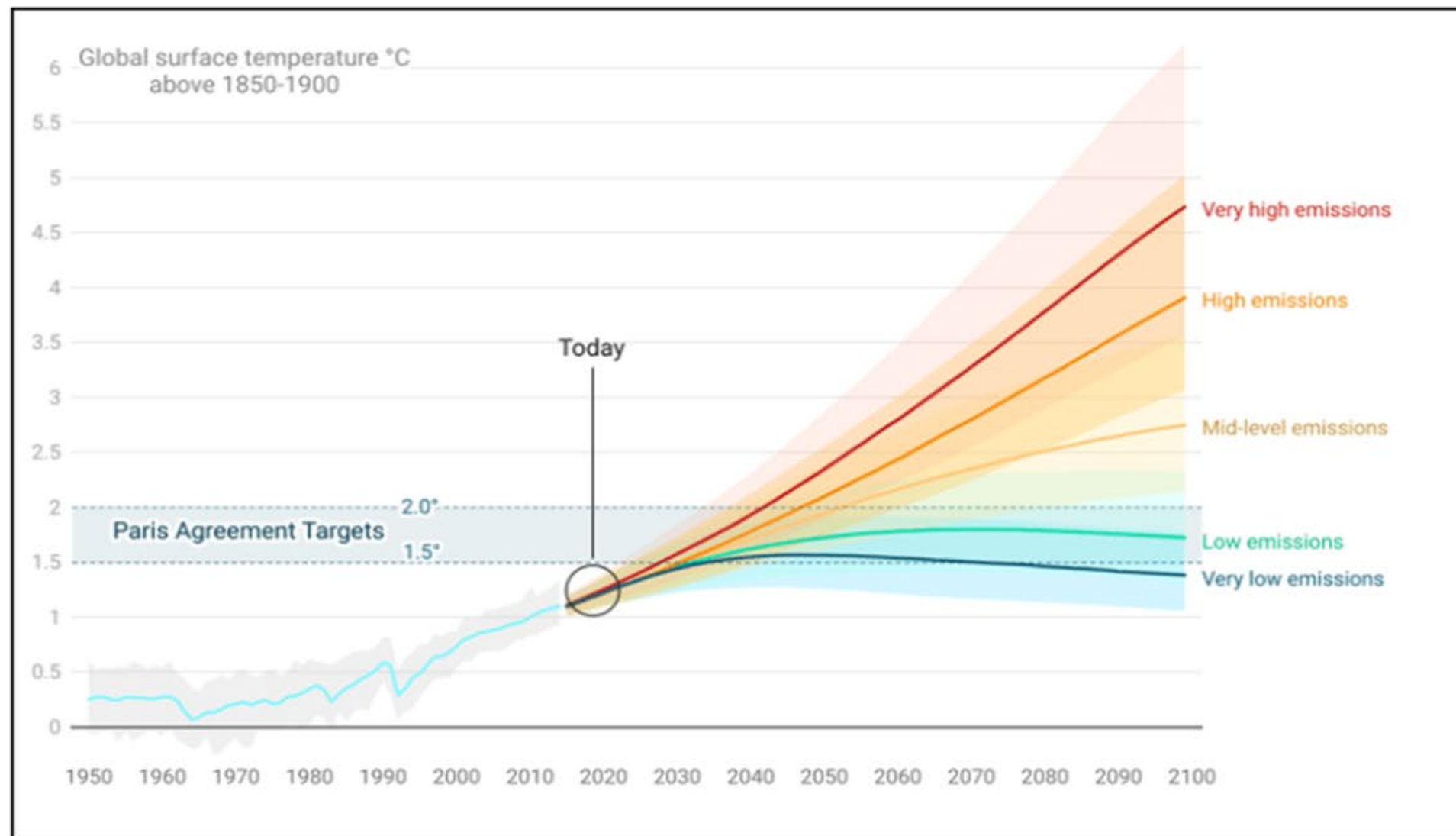
Dr. Marina Abdel Malak

Dr. Myles Sergeant

Global 2m Surface Temperature Anomaly: 1940 - 2024

Data: Copernicus ERA5







Health

Heat-related illness



Evacuation, trauma, anxiety, PTSD



Asthma and chronic obstructive pulmonary disease



Infection



Malnutrition



Conflict and migration



Ecological determinants of health

Extreme weather



Habitat and biodiversity loss



Soil loss



Water shortage



Global temperature rise



Sea-level rise





Health

Heat-related illness



Evacuation, trauma, anxiety, PTSD



Asthma and chronic obstructive pulmonary disease



Infection



Malnutrition



Conflict and migration



Social & structural determinants of health



Housing damage

Threats to livelihood

Reduced equity

Education and training disruption

Supply chain disruption

Destabilised government

Ecological determinants of health



Extreme weather



Habitat and biodiversity loss



Soil loss



Water shortage



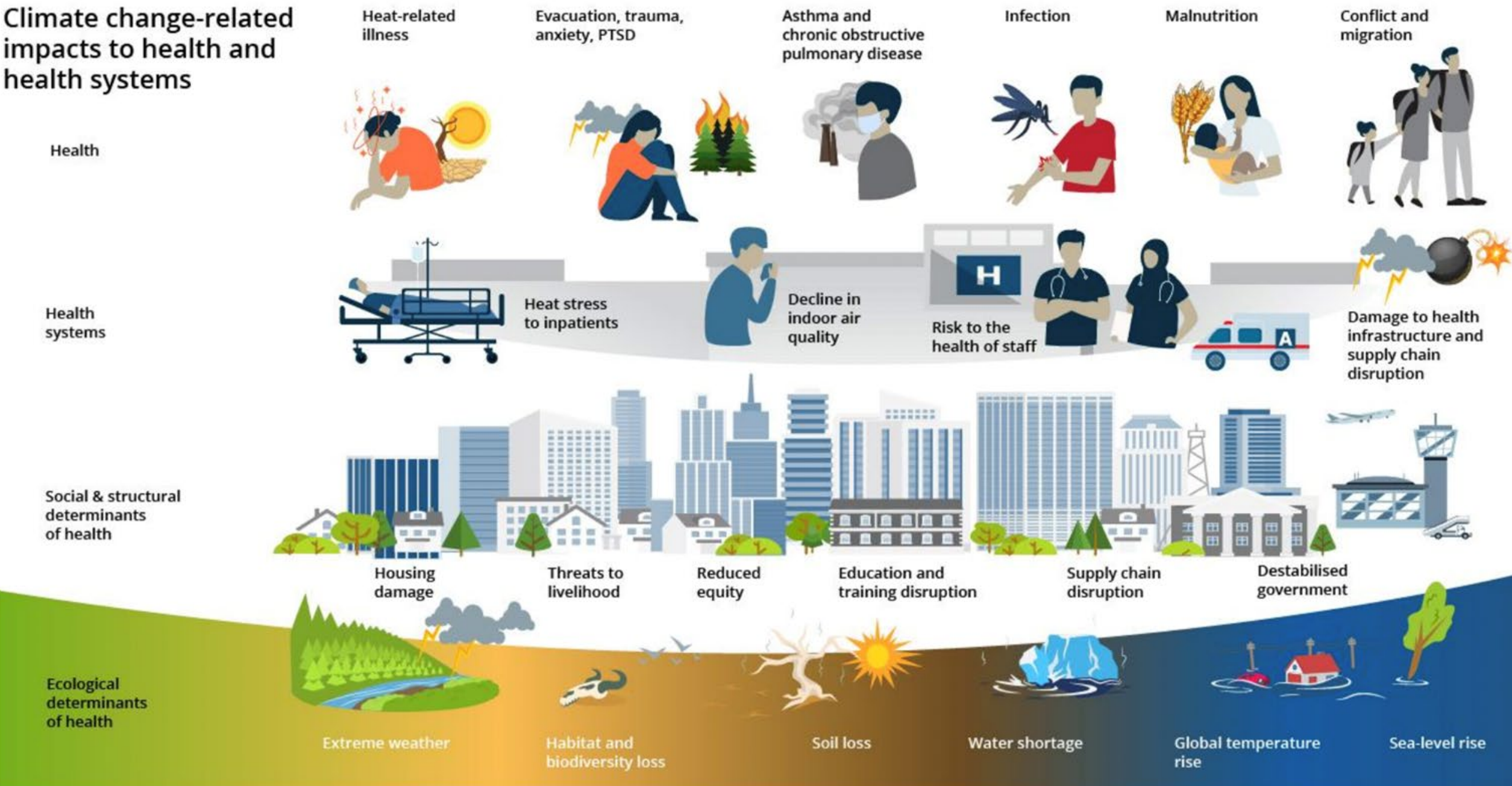
Global temperature rise



Sea-level rise



Climate change-related impacts to health and health systems



Are you feeling anxious yet?



Climate Emotions Wheel






DEBATE

Open Access



CrossMark

Climate change and mental health: risks, impacts and priority actions

Katie Hayes^{1*} , G. Blashki², J. Wiseman³, S. Burke⁴ and L. Reifels⁵

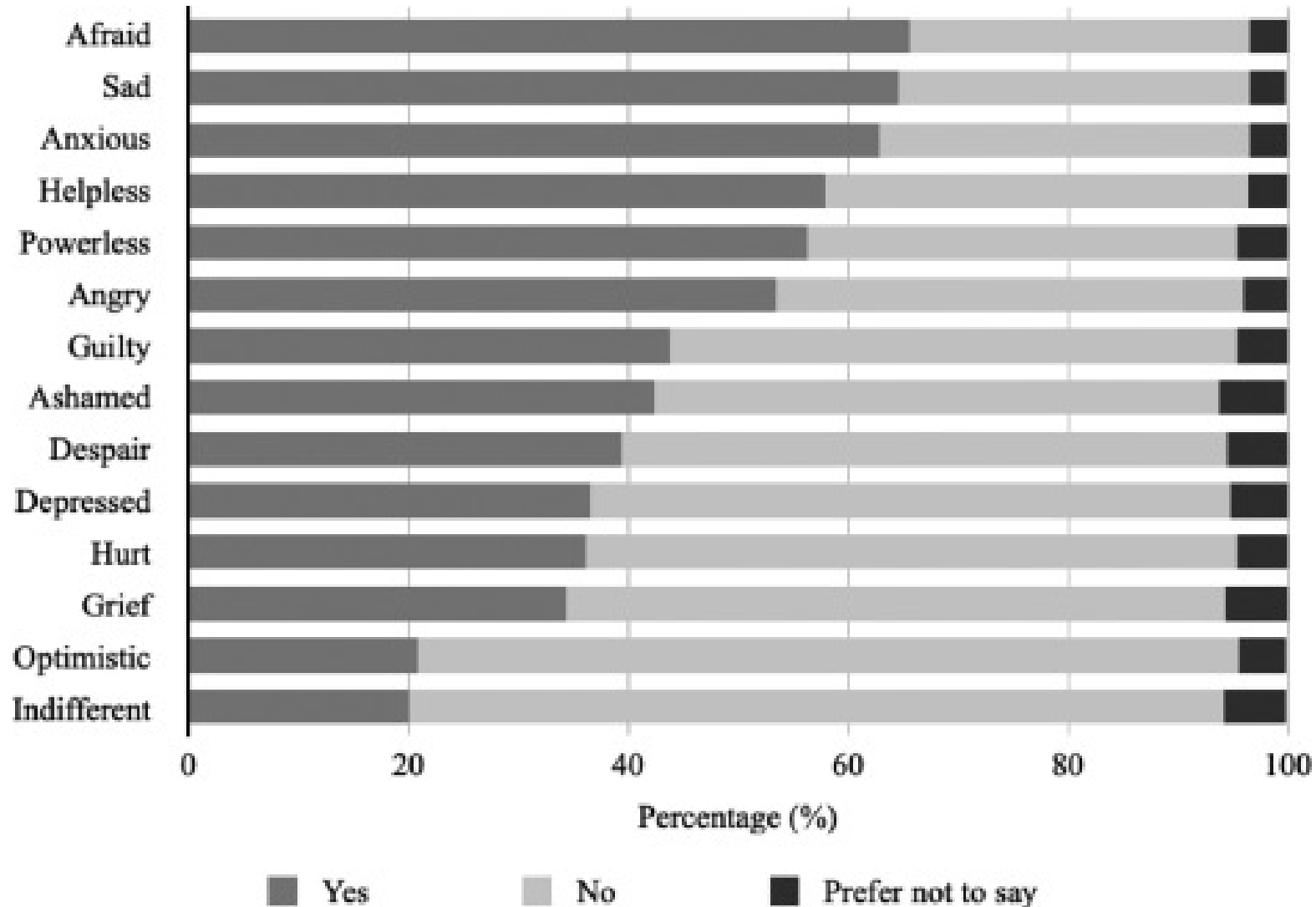
DIRECT

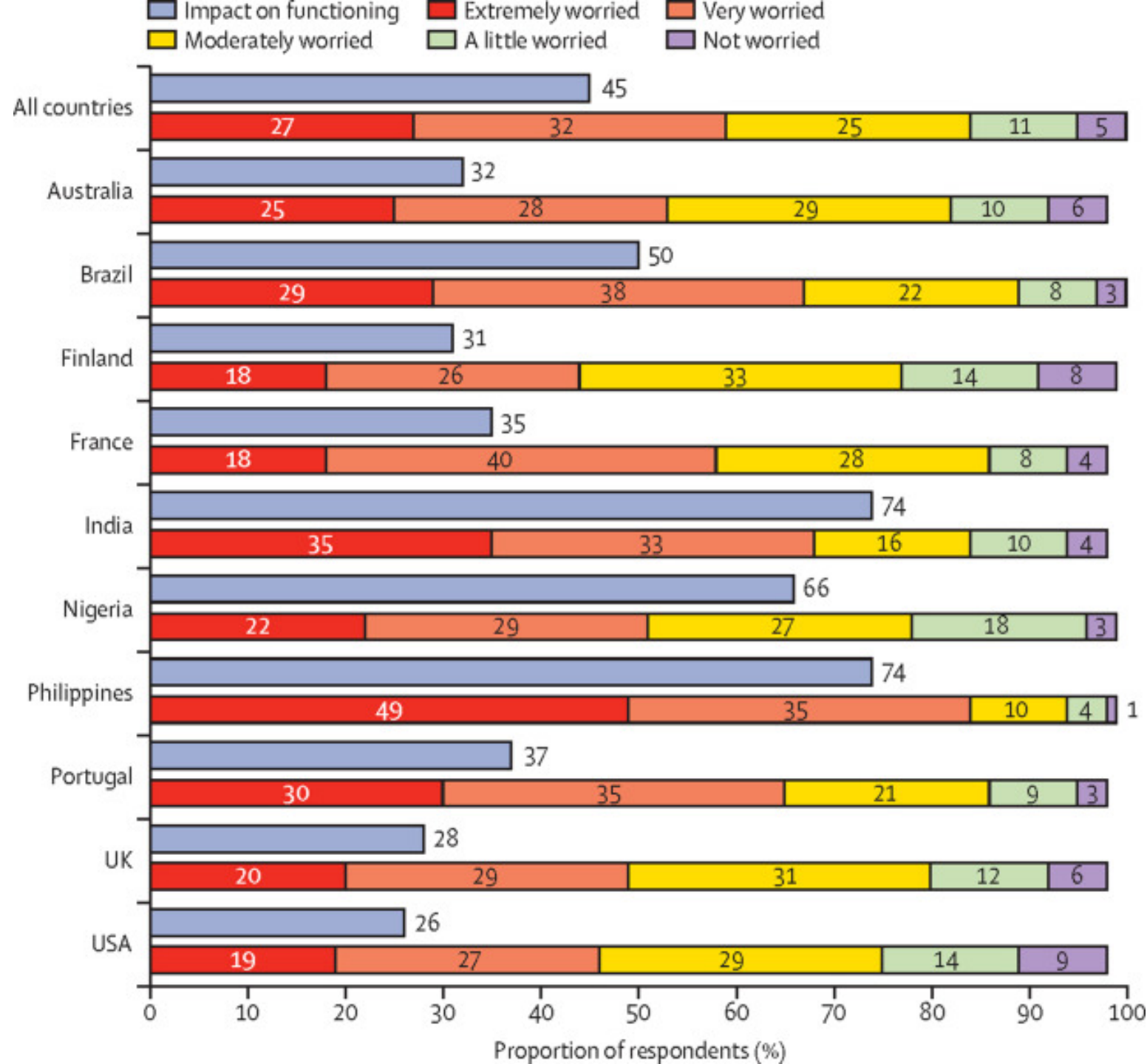
INDIRECT

OVERARCHING



Climate emotions are common





Process Model of Eco-anxiety and Ecological Grief

Panu Pihkala

Sustainability 2022

Direction chronologically →

Coping and changing



FIGURE NOTES

Semiconsciousness refers to a complex phase of both knowing and not knowing about the severity of the ecological crisis.

Awakening refers to a realization of the severity of the crisis. Sometimes people try to repress this Awakening and return to Semiconsciousness, but that is not completely possible and causes dissonance.

Shock and trauma may result in various ways from Awakening.

Coping and Changing: For healthy adjustment and necessary transformation, all three dimensions are needed (see also Figure 2).

* **Action** refers to doing something constructive in relation to the ecological crisis. Example: joining climate demonstrations.

* **Grieving** refers to encountering explicitly the various loss-related emotions engendered by the ecological crisis.

Example: talking about ecological grief at a safe discussion group.

* **Distancing** refers to various means of taking distance from the ecological crisis.

Example: staying away from environmental news on Sunday (self-care) or denial of outcome severity for oneself (disavowal/denial).

* **Strong Anxiety and/or Depression** refers to various possible manifestations of strong and difficult mental states which are significantly impacted by the ecological crisis. These include anxiety states and increased anxiety tendencies, varieties of depressed moods, burnout, longer states of resignation, and "eco-paralysis".

Adjustment and Transformation refers to a long-term process where all three dimensions are engaged with and people find ways to both adapt and change (see Figure 4).

Process Model of Eco-anxiety and Ecological Grief

Panu Pihkala
Sustainability 2022

Living with the ecological crisis

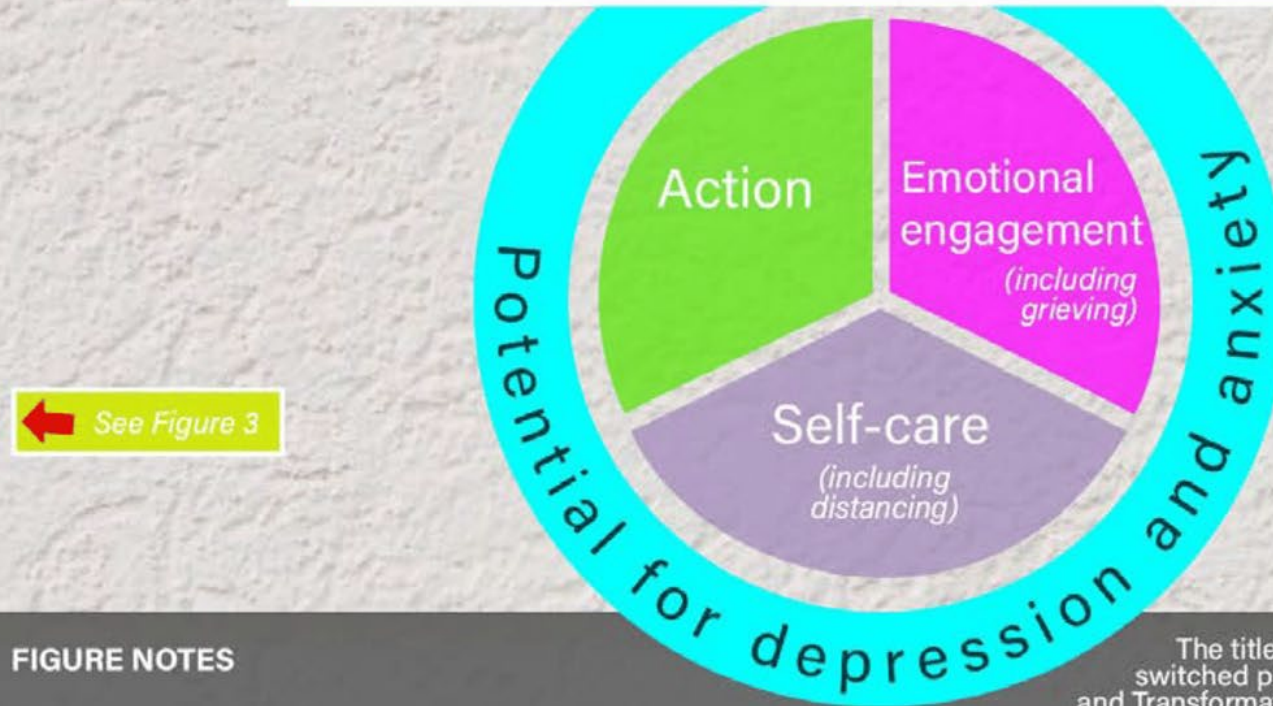


FIGURE NOTES

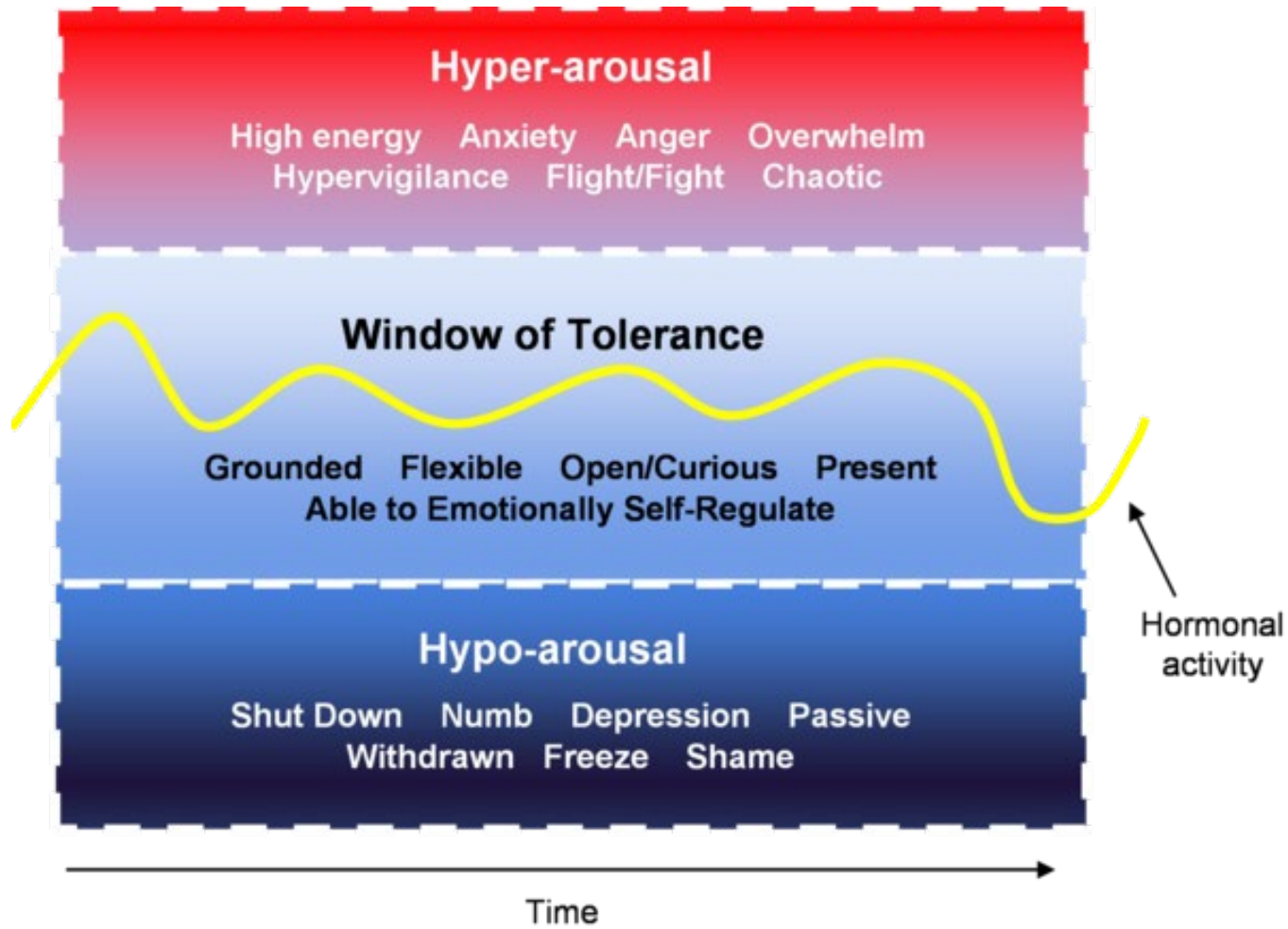
When enough Adjustment and Transformation has happened, people enter this phase where there is more awareness and control about the three dimensions. For various dynamics and terms related to these dynamics, such as "acceptance" and "meaning", see section 4.2.4. in the article.

All three dimensions still need engagement with, and they still include scale in them (there are various intensities): see also Figures 2 and 3.

The titles and subtitles of two dimensions have switched places, reflecting changes due to Adjustment and Transformation. While Grieving still continues, major aspects of it have been engaged with, and there is more room for encountering other emotions. Distancing has become more conscious and more balanced, and thus Self-care is the ruling form, although there may still be moments of stronger and more unconscious disavowal.

Potential for depression and stronger anxiety still exists, and it is possible that in the long run, various depressive moods are a major threat as many aspects of the ecological crisis become more difficult in the coming decades.

Stretching the window of tolerance



Jade Emery, Psychology Today



Tips for managing climate emotions

- Acknowledge and name emotions
- Embrace emotions
- Use coping tools such as mindfulness, breathwork, gratitude practice
- Connect with nature
- Connect with others & build community
- Take action
- Engage in healthy and joyful activities

<https://www.climatementalhealth.net/>



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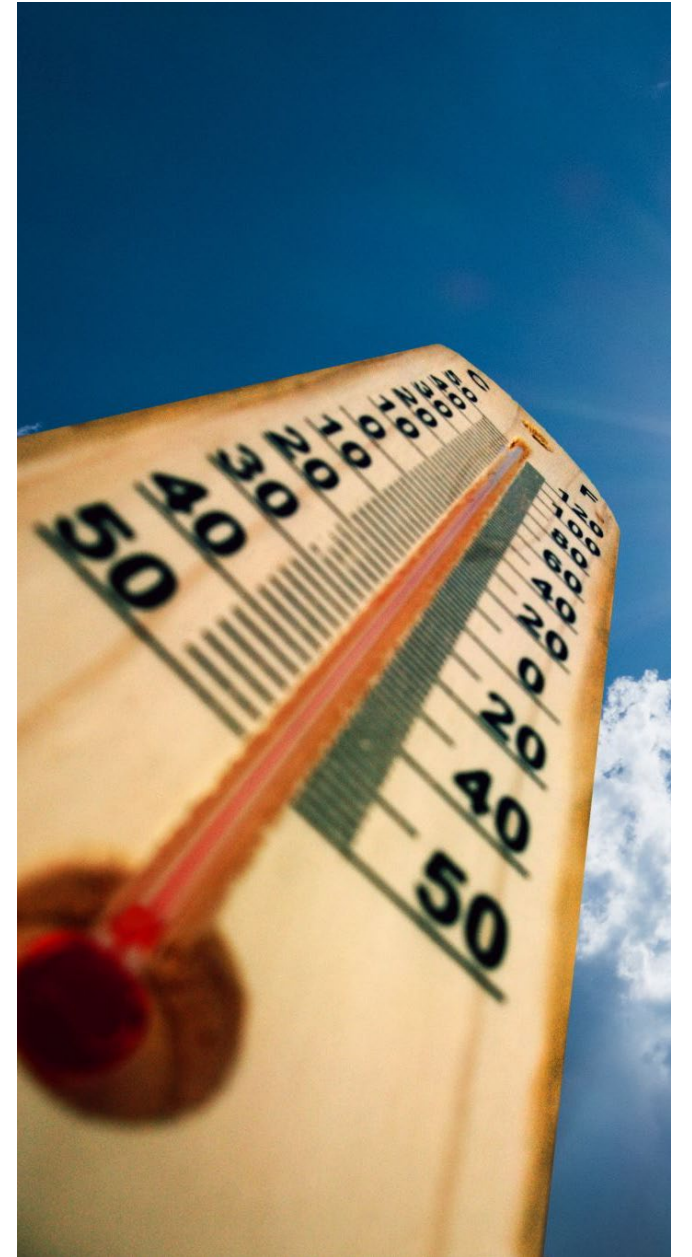
Climate Anxiety:

Take the temperature – and take **action!**

Dr. Marina Malak, MD, CCFP, B.Sc.. N
Family Physician, Mississauga, THP

Director of Assessment; Director of Competence

Family Medicine and FM-Enhanced Skills, TMU School of Medicine





What is Climate Anxiety?

- Distress about climate change and its impacts on the landscape and human existence.
- Anxiety, intrusive thoughts about future disasters or the long-term impacts
- Previous encounters of trauma with climate situations
- Impacts regular functioning

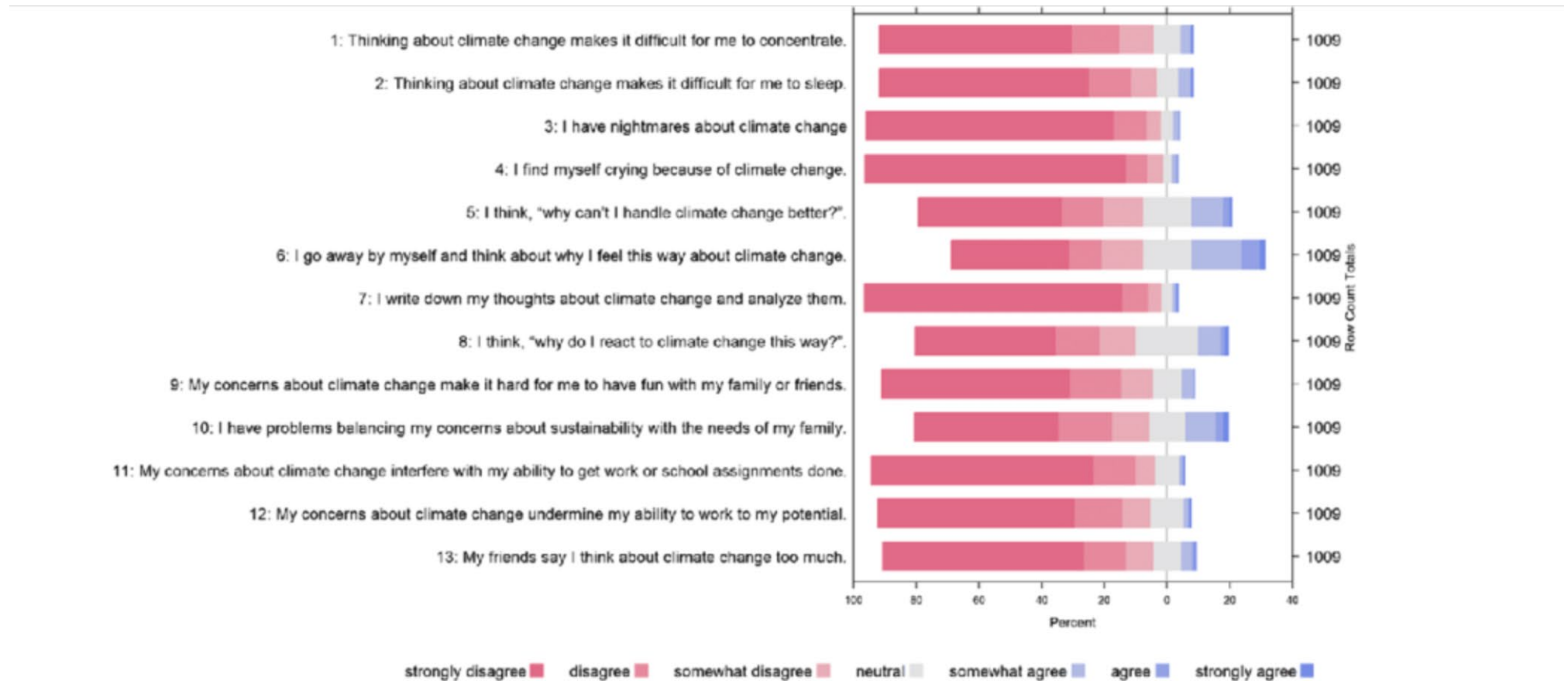
It's real – and it's common

- Global crises; personal encounters with impacts of climate change
- **Real** fear/distress – limits daily life and activities
- Not always identified or easily recognized
- Impacts existing health conditions

<https://www.psychologytoday.com/intl/articles/202501/worrying-for-the-world>



Climate Change Anxiety Scale



Cool ... (*not!*) –
now what?



What are the core symptoms?



What contributed to these feelings, thoughts, and behaviours?



How are the feelings, thoughts, and behaviours related?



What is ONE thing that can be done today?



“Burnt-out people aren’t equipped to serve a burning planet ... [so] the well-being of our hearts and souls must be reestablished to their rightful place as relevant, essential.”

-Susanne Moser

Treatments



Non-pharmacological and pharmacological



Behavioural: take action!



ACT-style: Values inventory



Community efforts and changes



CBT-style: thought-journal, evidence for/against

Medications



Second-line and ***combine!***



Anxiety? Depression? PTSD?



Start low, go slow



Realistic expectations: what are you targeting?
What is the expected duration and timeline?



Along with non-pharmacological strategies!

Summary



Climate anxiety is more common than we (and patients!) may realize



Climate Anxiety Scale → think about underlying causes and symptoms



Treatment starts with non-pharmacological strategies



Medications as needed



Take **action!** Change IS possible!

Resources

- Anxiety Canda: <https://www.anxietycanada.com/articles/coping-with-eco-anxiety/>
- All We Can Save: <https://www.allwecansave.earth/emotions>
- We Adapt: <https://weadapt.org/knowledge-base/youth-and-intergenerational-climate-justice/climate-anxiety-toolbox/>



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CLIMATE CHANGE

A TIMELINE

@SEMI-RAD

"CLIMATE
CHANGE
ISN'T REAL"

OOPS



OK, CLIMATE CHANGE
IS REAL, WE'RE JUST
NOT CONVINCED IT'S
CAUSED BY HUMANS

F ***

“An unknown future means we have the power and agency to shape it.
Hope should shove you out the door... to **hope** is to give yourself to the future -
and that commitment is what makes the present inhabitable.”



Rebecca Solnit **Hope** in the Dark



Trees for Hamilton

Me and my boys - Fall 2013



To plant native trees, in areas of need, to enhance health and well-being

Focusing on Hope

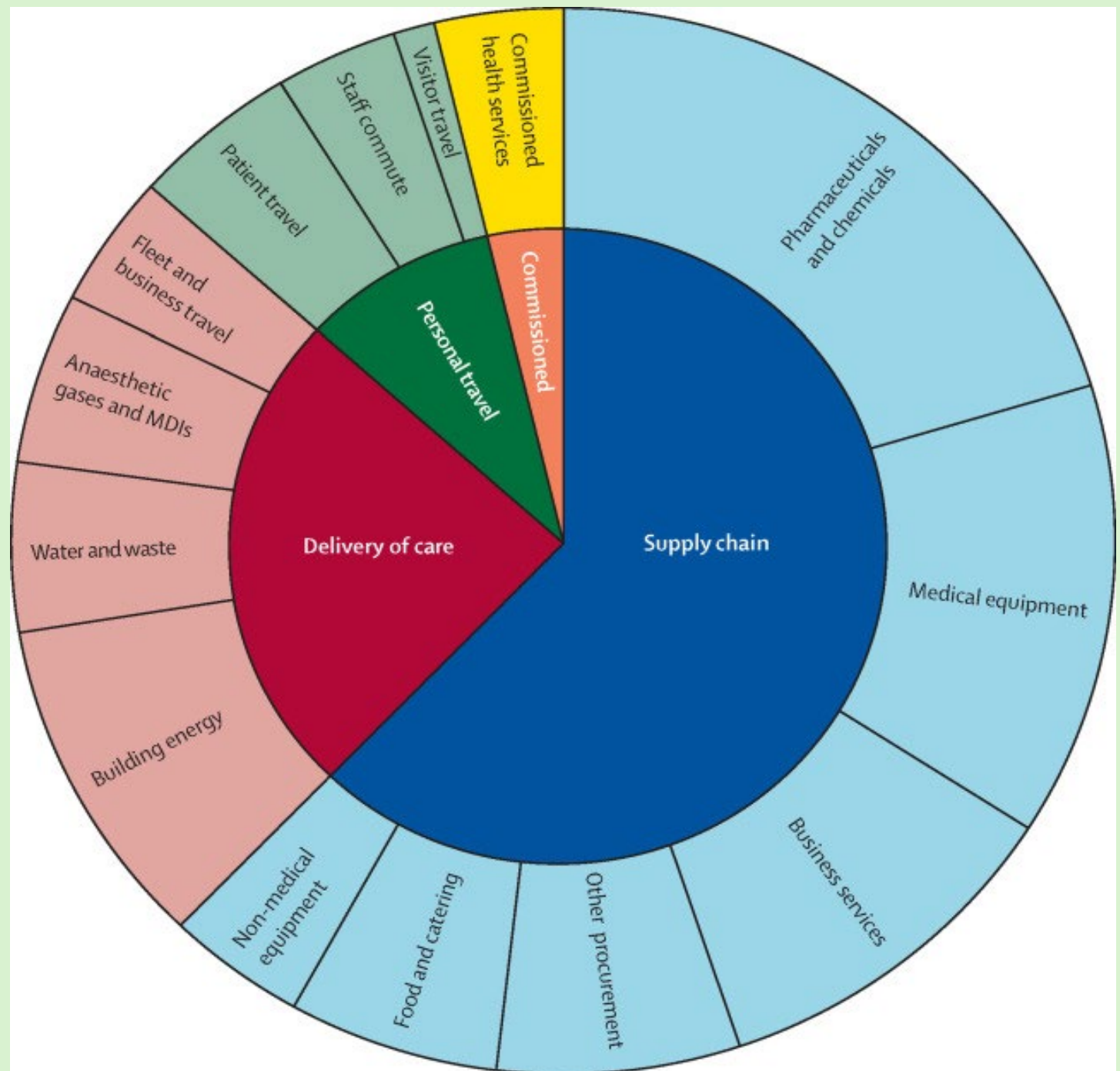


THE LANCET Planetary Health

Carbon footprint assessment
of the NHS in England, this is
the Entire health system!

Imogen Tennison, et al 2021

Supply chain = 2/3 of GHGs



Cold called 10 procurement leads in Ontario..

- “Did you know that you are the most important part sustainable health care?”
- We started a provincial sustainable procurement group in 2022
- Write a letter.... Hamilton Health Sciences wrote to 1000 suppliers.
- Add Sustainability language to your contracts... this is happening.
- Last fall we looked for a new co-chair





**Supply
Ontario**

Careers at Supply Ontario

About Us ▼

News and updates ▼

Procurement with the Ontario government ▼

Home > Building Ontario Businesses Initiative

Building Ontario Businesses Initiative

Food travels
4500 km from
field to plate
in Ontario

Want to buy Canadian? There's an app for that

Entrepreneurs across the country creating barcode-scanning apps for Canadian ite



[Jenna Benchetrit](#) · CBC News · Posted: Feb 21, 2025 4:00 AM EST | Last Updated: February 21

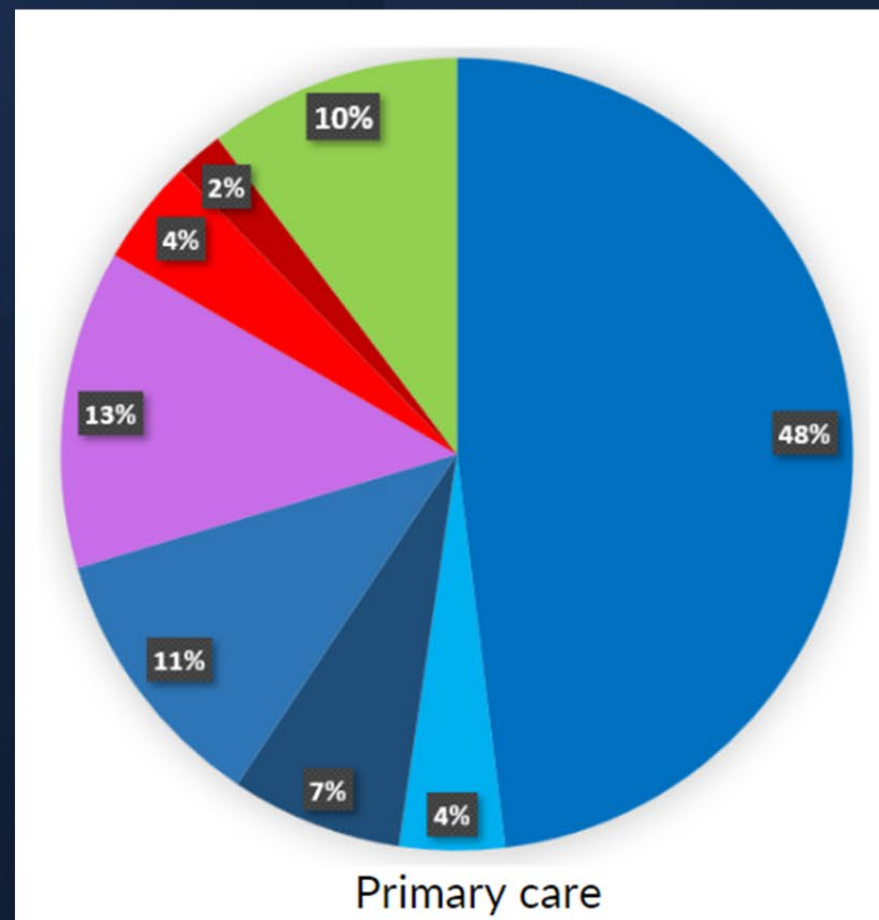


Hope within healthcare – actions make a difference!

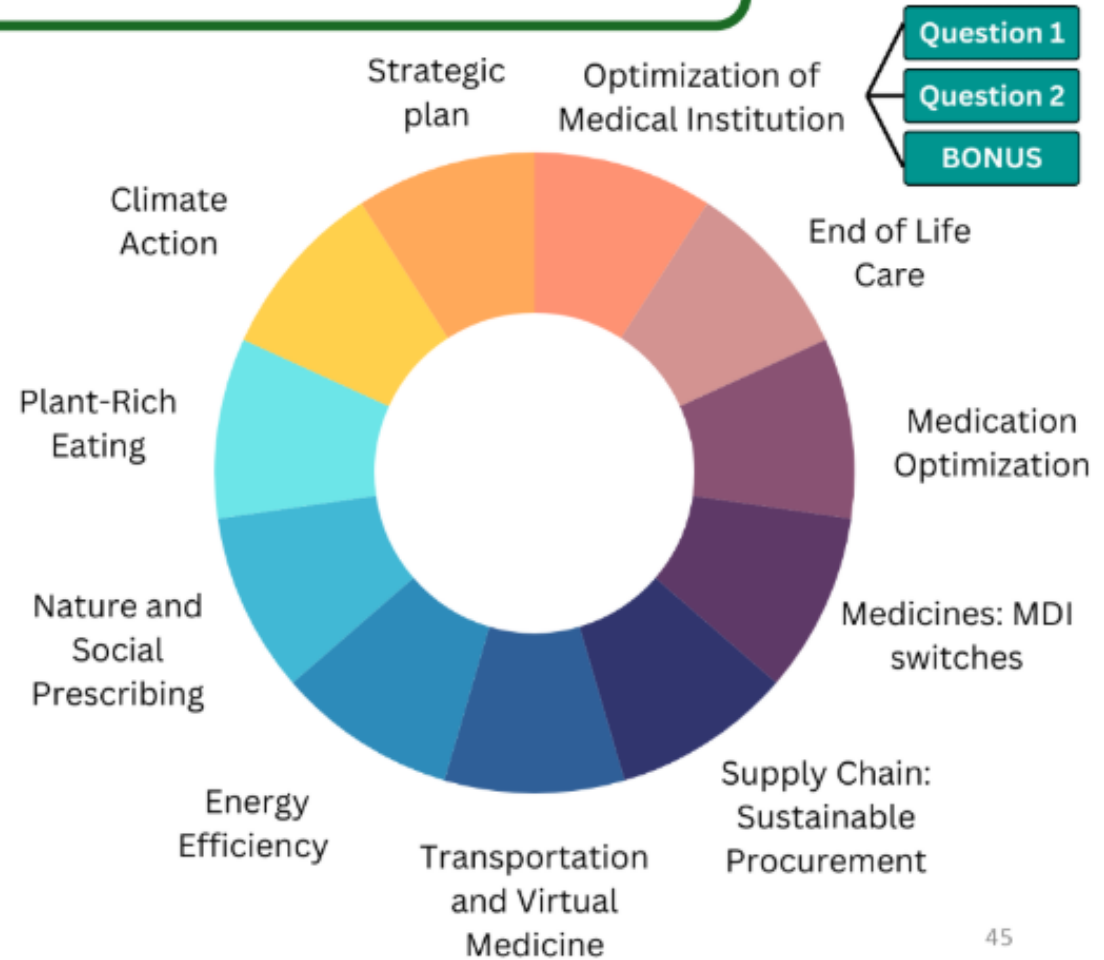
- Supply Ontario is co leading our sustainable procurement group
 - Desflurane, banned in 2 hospitals in Ontario in 2021, now in 28
 - Newfoundland and NWT have completely banned Desflurane
 - Strategic plans of hospitals on the rise
-
- HFHT Green Initiative, started in 2019 by Dr Meghan Davis
 - Now one of many primary care initiatives in Canada

Climate action... What about my clinic?

Categories
Supply Chain
Pharmaceuticals
Medical Equipment
Non-Medical Equipment
Other Procurement
Medications (Delivery of Care)
Anaesthetic Gases & MDIs
Delivery of Care
Building Energy
Water & Waste
Travel
Business & Personal Travel



Green Office Challenge: 2024



Question 1

Question 2

BONUS

Green office challenge .. Challenge yourself



- You are already doing this!
- Pick one fruit per year
- A sustainable health system cannot exist without robust primary care!
- Preventing ER visits
- Preventing hospitalizations
- Advising on healthy diet
- Managing medications





GREEN INITIATIVE

MENTORSHIP PROGRAM

2024-2025



Family Medicine



Goal: Help clinics implement sustainable initiatives, with the support of one-on-one mentorship and guidance from primary care providers with backgrounds in sustainability.

Start:
January 2025
Project Showcase:
December 2025.



Connect with a sustainability mentor

**Build an agreement,
Define timelines,
Implement your initiative**

**Evaluate the impact
& reflect**

**Become part of the
Centre of Excellence**



Trees for Hamilton

Areeb@greenhealthcare.ca

Canadian Healthcare Forests

Sama@greenhealthcare.ca

Green Teams project

(Environment and Climate Change Canada)

Autumn@greenhealthcare.ca

June@greenhealthcare.ca

Mentee/ Mentor program

(and all things 'green primary care')

elizaveta.zvereva@hamiltonfht.ca

Write a letter to suppliers

Dr Beth Henning

bmhenning29@gmail.com

Volunteering for Canadian Coalition for Green Health Care

mikayla@greenhealthcare.ca

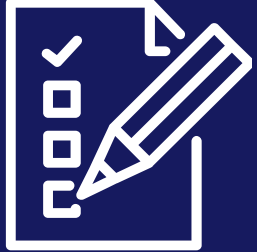
www.treesforhamilton.ca

<https://hamiltonfht.ca/about-us/green-initiative/>

www.peachhealthontario.com

www.greenhealthcare.ca

Resources Tools



Links to resources shared today will be sent to participants following the session.

Tools and Resources

Resource	Link
The Intergovernmental Panel on Climate Change	https://www.ipcc.ch/
Article: Learning to Treat the Climate Emergency Together: Social Tipping Interventions by the Health Community	https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196(23)00022-0/fulltext
Article: Climate Change & Mental Health Risks Impacts and Priority Actions	https://livingresilience.net/katie-hayes-2018-climate-change-mental-health-risks-impacts-and-priority-actions/
Article: Climate Emotions and Anxiety Among Young People in Canada: A National Survey and Call to Action	https://www.sciencedirect.com/science/article/pii/S2667278223000032
Article: Climate Anxiety in Children and Young People and their Beliefs about Government Responses to Climate Change: A Global Survey	https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196(21)00278-3/fulltext
Article: The Process of Eco-Anxiety and Ecological Grief: A Narrative Review and a New Proposal	https://www.mdpi.com/2071-1050/14/24/16628
Climate Mental Health Network	https://www.climatementalhealth.net/
Worrying for the World	https://www.psychologytoday.com/intl/articles/202501/worrying-for-the-world
Article: Development and Validation of a Measure of Climate Change Anxiety	https://www.sciencedirect.com/science/article/abs/pii/S0272494419307145
Anxiety Canda	https://www.anxietycanada.com/articles/coping-with-eco-anxiety/
All We Can Save	https://www.allwecansave.earth/emotions
We Adapt	https://weadapt.org/knowledge-base/youth-and-intergenerational-climate-justice/climate-anxiety-toolbox/
Trees for Hamilton	https://treesforhamilton.ca/
Peach Health Ontario	https://peach.healthsci.mcmaster.ca/
The Canadian Coalition for Green Health Care	www.greenhealthcare.ca

Resources Education



Links to resources shared today will be sent to participants following the session.

Practising Well CoP – Self Learning Program

The Practising Well CoP is now certified for self learning credits!

Earn **1-credit-per-hour** for reviewing the recording and resources from **past CoP sessions**. The self learning program is certified for up to 50 Mainpro+ credits.

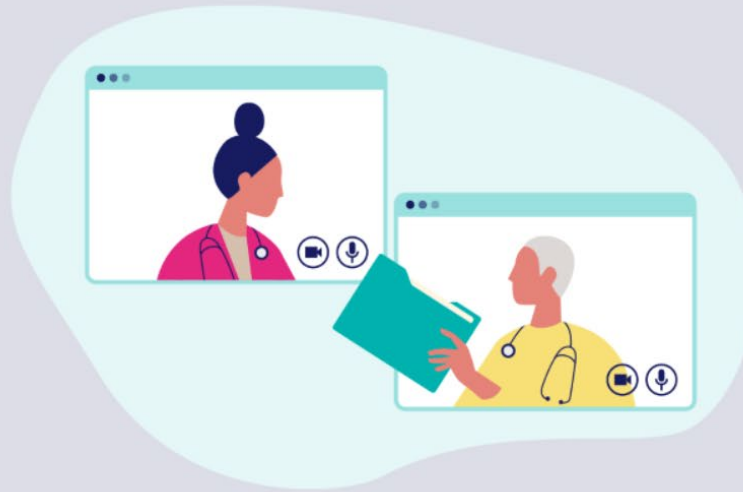


**Learn More and
Participate**



Peer Connect

Enabling you to connect, share and learn from your fellow family physicians.



Mentorship Program - Connect with a Peer Guide!

An opportunity to partner with another family physician, **one-to-one or in a small group**, for support as you **explore clinical complexity and increase your confidence** caring for patients with mental health challenges, substance use, and chronic pain. A focus can be on your well-being as you engage in this challenging work.



[Peer Connect](#)

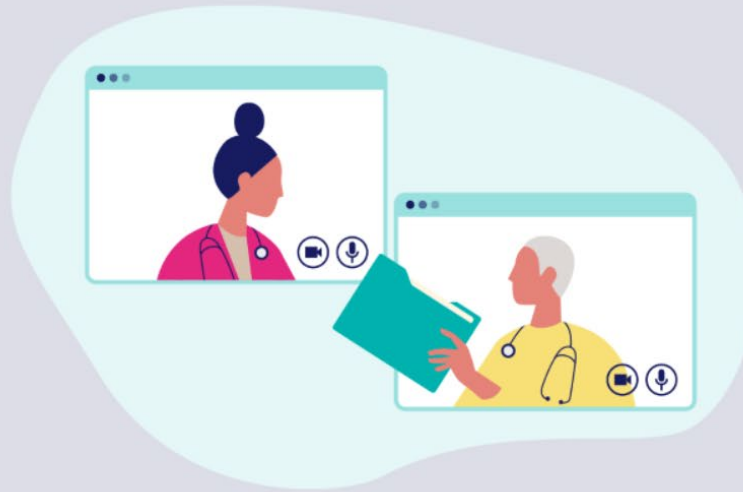


practisingwell@ocfp.on.ca



Peer Connect

Enabling you to connect, share and learn from your fellow family physicians.



Small Group Learning

Join our small group learning sessions to celebrate your wins, explore common challenges and discover new strategies for success. Space remains in the following groups: **Mental Health in Primary Care Interest Group** and **Support for Physicians Living with Chronic Illness and/or disability**.



[Small Groups](#)



practisingwell@ocfp.on.ca

Osteoporosis and Fracture Prevention Workshop

What you'll gain:

- A **practical toolkit** with resources and video content to support you in your practice.
- **Expert insights** from facilitators sharing the latest updates from the 2023 clinical practice guideline.
- A **collaborative learning experience** designed specifically for family physicians.

April 30th, 2025 | 1 p.m. – 4 p.m.

\$195 + HST

Three-credit-per-hour Mainpro+ certified program

[Registration now open](#)



Scan to
learn more

Resources

Supports



Resources

Supports



OMA Physician Health Program

<https://php.oma.org>

Centre for Addiction and Mental Health
Health Care Provider (HCP) Resource
Site

<http://www.camh.ca/covid19hcw>

CMA Wellness Hub

<https://www.cma.ca/physician-wellness-hub>



- PARO 24/7 Helpline for Residents, Family Members, Medical Students
- 1-866-HELP-DOC



- <https://www.ontario.ca/#support-health-care-worker>
 - Self-led / With peers / Talk to a clinician
- [Ontario Shores Centre for Mental Health Sciences, Whitby](#)
- [St. Joseph's Healthcare, Hamilton](#)
- [The Royal Ottawa Mental Health Centre, Ottawa](#)
- [Waypoint Centre for Mental Health Care, Penetanguishene](#)
- [Centre for Addictions and Mental Health \(CAMH\), Toronto](#)



- ECHO Coping with COVID
 - for health providers (educational credits)
 - Fridays 2-3pm EST
- <https://camh.echoontario.ca/echo-coping-with-covid/>

Support for you and those you care about.

Upcoming Community of Practice

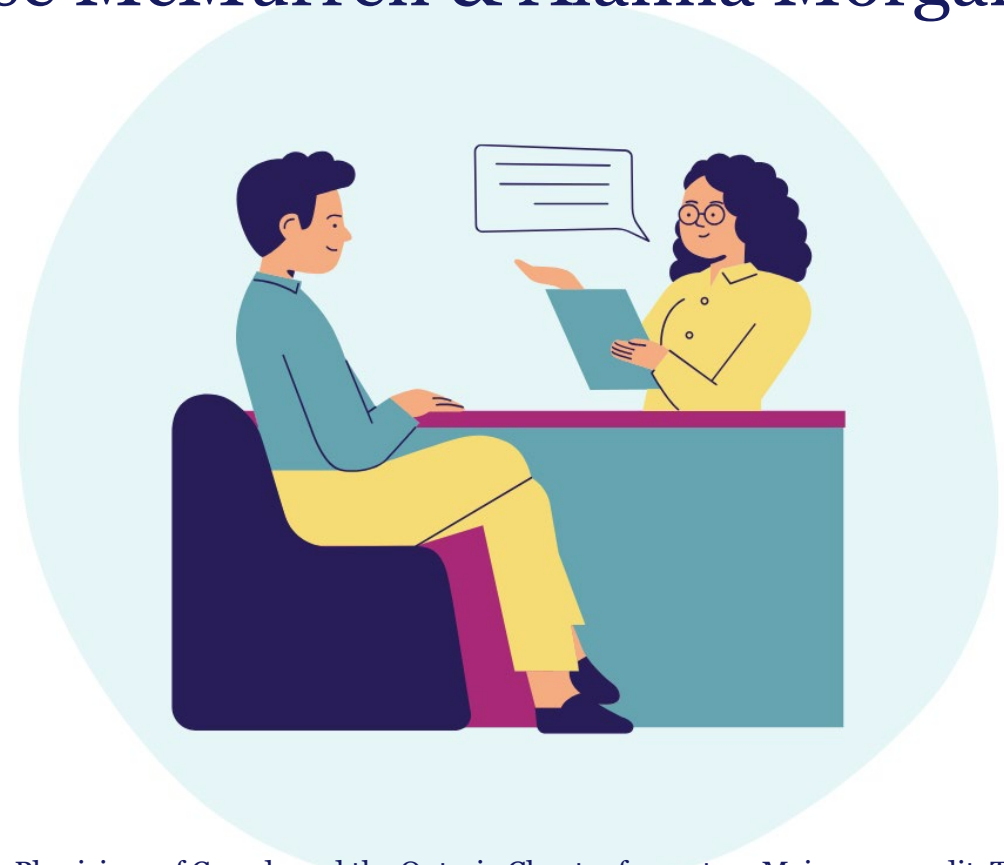
Indigenous cultural safety: Confronting anti-Indigenous racism and providing trauma-informed care

with Drs. Rebekah Neckoway, Chase McMurren & Alanna Morgan

April 23, 2025
8:00am – 9:00am

[Register Now](#)

practisingwell@ocfp.on.ca



This one-credit-per-hour Group Learning program has been certified by the College of Family Physicians of Canada and the Ontario Chapter for up to 1 Mainpro+ credit. The Practising Well Community of Practice includes a series of planned live, interactive sessions. Each session is worth 1 Mainpro+ credits, for up to a total of 12 credits.