

The unseen impacts of climate change on mental health

From Fort St. John to Victoria, and Cranbrook to Dease Lake, effects of climate change, including wildfires, drought, flooding, and severe weather events, are occurring with increasing frequency and severity across the province.¹ It is estimated that there has been a 1.4 °C average temperature increase across British Columbia in the last century, with an increase of 1.3 to 2.7 °C projected by 2050.¹ The health effects of this warming are numerous and multifaceted with implications for clinical practice across specialties.²

Although often unseen, and less prominent in headlines, climate change and associated sequelae have both direct and indirect implications for mental health and psychosocial well-being.² Specifically, climate change has been associated with numerous mental health conditions including posttraumatic stress disorder (PTSD), depression, anxiety, grief, substance use disorders, and suicidal ideation among many others.³ Older adults, children, those with pre-existing conditions, comorbidities, limited culturally safe supports, and/or lower socioeconomic status may be more vulnerable during emergencies.⁴

Over the last few years wildfires across the province, exacerbated by changing weather patterns and temperature increases, have resulted in poor air quality, displacement and housing insecurity, food and water insecurity, and social isolation, and have affected employment opportu-

nities for some British Columbians—all with mental health implications for those affected. Studies of similar experiences in Fort McMurray, Alberta, after wildfires forced total evacuation in 2016, suggest that psychosocial impacts from the fires were widespread and likely to persist following evacuation.⁵ In the context of disasters, health care providers and first responders are often among those affected. Despite growing appreciation of the mental health effects associated with climate change, measuring these effects has proven to be particularly challenging due to the problems of causation and attribution.³

For physicians and other health care providers, the mental health effects of climate change will undoubtedly continue to affect our patients, our practices, and our communities for years to come. In this context, support for mitigation and adaptation strategies by clinicians is essential.⁶ Adaptation strategies focus on systemic modifications to reduce the risk of and cope with the negative effects of climate change. The 2018 Lancet Countdown Briefing for Canadian Policymakers recommended investing in research on the mental health effects of climate change and psychosocial adaptation.⁷ Building a robust evidence base to inform adaptation measures to protect and promote mental health is a critical first step. Possible adaptation measures targeting mental health may include:

- Expanding access to mental health services, including cognitive behavioral therapy, crisis counseling, and individual/group therapy.
- Increasing primary care interventions to improve mental health and promote resilience.
- Improving surveillance and monitoring of mental health in the context

of climate change–related events.

- Integrating robust, evidence-based measures to address psychosocial well-being in climate action plans as well as emergency preparedness planning.⁴
- Enhancing training for health care providers and first responders in addressing the psychosocial needs of patients.³

Given current climate-related projections, it is important that the BC physician community develop an awareness of the psychosocial implications of climate change and actively participate in efforts to prepare, advocate, and respond.

—Elizabeth Wiley, MD,
JD, MPH

References

1. British Columbia Ministry of Environment. Indicators of climate change for British Columbia, 2016 update. 2016. Accessed 18 March 2019. https://www2.gov.bc.ca/assets/gov/environment/research-monitoring-and-reporting/reporting/envreport/bc/archived-reports/climate-change/climatechangeindicators-13sept2016_final.pdf.
2. Watts N, Adger WN, Agnolucci P, et al. Health and climate change: Policy responses to protect public health. *Lancet* 2015;386(10006):1861-1914.
3. Hayes K, Blashki G, Wiseman J, Burke S, Reifels L. Climate change and mental health: Risks, impacts and priority actions. *Int J Ment Health Syst* 2018;12:28.
4. Doctors of BC. Improving collaboration in times of crisis: Integrating physicians in disaster preparedness and health emergency management. Accessed 10 March 2019. https://www.doctorsofbc.ca/sites/default/files/disaster_preparedness_policy_paper_web_id_235753.pdf.
5. Cherry N, Haynes W. Effects of the Fort

Continued on page 188

This article is the opinion of the Environmental Health Committee, a subcommittee of Doctors of BC's Council on Health Promotion, and is not necessarily the opinion of Doctors of BC. This article has not been peer reviewed by the BCMJ Editorial Board.

Continued from page 187

PRACTICE SURVIVAL SKILLS Vancouver, 15 Jun (Sat)

The 12th annual Practice Survival Skills—What I Wish I Knew in My First Years of Practice conference will be held at the UBC AMS Nest and emphasize practical, nonclinical knowledge crucial for your career. Topics include billing and billing forms, rural incentives, MSP audits, medicolegal advice and report writing, job finding and locums, financial and insurance planning, practice management and incorporation, licensing and credentialing, and digital communication advice. Target audience: family physicians, specialty physicians, locums, IMGs, physicians new to BC, family practice and specialty residents, and physicians working in episodic care settings. Course format comprises collaborative didactic lectures and interactive small-group workshops; plenty of networking opportunities, and practice-based exhibits. Join us in the afternoon for a job fair and networking reception to meet with colleagues and make career connections. Program details and online registration at <https://ubccpd.ca/course/practice-survival-skills-2019>. Tel: 604 675-3777, email: cpd.info@ubc.ca.

GP IN ONCOLOGY TRAINING Vancouver, 9–20 Sep and 3–14 Feb 2020 (Mon–Fri)

The BC Cancer's Family Practice Oncology Network offers an 8-week General Practitioner in Oncology training program beginning with a 2-week introductory session every spring and fall at the Vancouver Centre. This program provides an opportunity for rural family physicians, with the support of their community, to strengthen their oncology skills so that they may provide enhanced care for local cancer patients and their families. Following the introductory session, partici-

pants complete a further 30 days of customized clinic experience at the cancer centre where their patients are referred. These can be scheduled flexibly over 6 months. Participants who complete the program are eligible for credits from the College of Family Physicians of Canada. Those who are REAP-eligible receive a stipend and expense coverage through UBC's Enhanced Skills Program. For more information or to apply, visit www.fpon.ca, or contact Jennifer Wolfe at 604 219-9579.

ST. PAUL'S EMERGENCY MEDICINE UPDATE

Whistler, 26–29 Sep (Thu–Sun)

Join us for the 17th Annual St. Paul's Conference. Four exciting days of learning, networking, and of course, recreation! We had over 300 attendees last year. Don't miss out! Pre-conference workshops: CASTED, HOUSE EM, CAEP AIME. Target audience: Any physician providing emergency care, emergency nurses, paramedics. Keynotes: Best Literature of the Past Year (Dr Grant Innes, Dept. of Emergency Medicine, University of Calgary); Sub-Arachnoid Hemorrhage—What the ED Doc of 2019 Needs to Know (Dr Jeff Perry, Dept. of Emergency Medicine, The Ottawa Hospital); Gender and Medicine in 2019—Where Are We? Where Can We Go? How Can We Get There? (Dr Carolyn Snider, St. Michael's Hospital, Toronto); Managing Stress in a High Risk Environment (Mr Will Gadd, gold medalist, X-Games). Conference details and registration: <https://ubccpd.ca/course/sphemerg-2019>. Accommodation: <http://bit.ly/sph2019reservations>. Tel: 604 675-3777, fax: 604 675-3778, email: cpd.info@ubc.ca.

Continued from page 180

- McMurray wildfires on the health of evacuated workers: Follow-up of 2 cohorts. *CMAJ Open* 2017;5:e638-e645.
- Peterson E, Lu J. Responding to climate change in BC: What can physicians do? *BCMJ* 2017;59:227-229.
 - Lancet countdown 2018 report: Briefing for Canadian policymakers. Accessed 10 March 2019. www.lancetcountdown.org/media/1418/2018-lancet-countdown-policy-brief-canada.pdf.

gpssc

Continued from page 181

- commission.ca/sites/default/files/MHCC_Report_Base_Case_FINAL_ENG_0_0.pdf.
- Cuijpers P, Weitz E, Twisk J, et al. Gender as predictor and moderator of outcome in cognitive behavior therapy and pharmacotherapy for adult depression: An "individual patient data" meta-analysis. *Depress Anxiety* 2014;31:941-951.
 - Bandelow B, Seidler-Brandler U, Becker A, et al. Meta-analysis of randomized controlled comparisons of psychopharmacological and psychological treatments for anxiety disorders. *World J Biol Psychiatry* 2007;8:175-187.
 - Canadian Mental Health Association. Mental health in the balance: Ending the health care disparity in Canada. Accessed 12 February 2019. <https://cmha.ca/news/ending-health-care-disparity-canada>.
 - Provincial Health Services Authority. BC community health data. Accessed 18 March 2019. <http://communityhealth.phsa.ca/getthedata/searchbylocation>.
 - Victoria Division of Family Practice. Cognitive behavioural therapy (CBT) skills group. Accessed 18 March 2019. www.divisionsbc.ca/victoria/resources/mhsu-program/cbt-skills-group.
 - Shared Care Learning Centre. CBT skills groups spread initiative. Accessed 18 March 2019. www.sharedcarelearningcentre.ca/wp-content/uploads/2019/01/CBT-Skills-Spread-Project-Template.pdf.