2022 EH Scan



ENVIRONMENTAL HEALTH RESEARCH SCAN

WITH COVID-19 SECTIONS VOL 5 (7) JULY 2022



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Environmental Health (EH) Research Scan: Aims and Scope

NCCEH's EH Research Scan aims to expand awareness of topics in environmental health, in line with NCCEH's vision to be the indispensable online resource for environmental health practitioners and policy-makers across Canada. This research scan is not peer reviewed; it does not cover all research, news, and information, and NCCEH is not responsible for the accuracy of the content from media or databases. Not all links are open access; some are abstract links where paid journal subscription is required.

COVID-19 Publications are listed in the sections above and there are also COVID-19 Additional Topics.



EDITOR PICKS

Health checks during extreme heat events [guidance document].

National Collaborating Centre for Environmental Health

"This tool from the NCCEH was designed to help support people doing heat checks by providing all they key information and guidance in a 5-page package." more



The unprecedented Pacific Northwest heatwave of June 2021[preprint] Sarah B Henderson (right), Scientific Director of Environmental Health Services at the BCCDC, and co-authors

"The impacts of this event were catastrophic. Estimates indicate at least 900 attributable deaths occurred across BC, WA and OR, likely the deadliest weather event in Canadian history." More



Short-term exposure to wildfire smoke and pm2.5 and cognitive performance in a brain-training game: a longitudinal study of U.S. Adults Sarah B Henderson (right), Scientific Director of Environmental Health Services at the BCCDC, and co-authors

"Our results indicate that PM2.5PM2.5 and wildfire smoke were associated with reduced attention in adults within hours and days of exposure, but further research is needed to elucidate these relationships."



Benzene contamination in sunscreen: Not worth getting burned [blog]. Kelsey James, Environmental Health Knowledge Translation Scientist, NCCEH

"This blog will describe the health effects of benzene exposure, discuss the current findings of benzene contamination in sunscreen products, and present opportunities for public health messaging around sunscreen use in the context of the potential risk of benzene exposure..." more



Monkeypox in personal service establishments: low risk, but know the signs [blog]

Leah Rosenkrantz (right) and Angela Eykelbosh, Knowledge Translation Scientists, National Collaborating Centre for Environmental Health

"This blog provides an overview of the monkeypox outbreak in Canada and outlines key information for public health inspectors to address risk in personal service establishments and other public settings where there may be potential for transmission."





Climate change, coastal communities, and food from the sea [blog] Juliette O'Keeffe, Environmental Health, Knowledge Translation Scientist, NCCEH

"....Public health (PH) practitioners could play a crucial role in helping communities, in partnership with provincial and federal agencies, and local governments, to minimise the impacts of climate change on coastal food systems."



Legionella [topic page]

National Collaborating Centre for Environmental Health

"Knowledge gaps remain on how climate change could affect risks of legionellosis but rising ambient temperature in a building's cold-water system may affect Legionella survival and growth in pipes, fixtures and stored water. Increased cooling demand, supplied by more air conditioners, or use of fountains or water misters, could increase opportunities for exposure. The resources listed here" more



ncceh.ca

Coastal waters, fresh water, and other untreated recreational water venues [topic page]

National Collaborating Centre for Environmental Health

"The resources presented provide information on identifying physical, biological, and chemical hazards in recreational waters, and tools for monitoring and managing recreational waters to reduce the risks to users."



Pool, hot tubs and other treated recreation water venues [topic page]. National Collaborating Centre for Environmental Health

"The resources presented provide information on guidelines and regulation of public pools and splash parks. We also provide some examples on how the provinces and territories are addressing risks from residential pools."



Climate change and Indigenous Peoples' health in Canada [webinar] Donna Atkinson and Leah Quinlan – held June 8, 2022

Daily and hourly exposure to PM2.5 and wildfire smoke and cognitive performance in a brain-training game: A longitudinal study of US adults [webinar]. Stephanie Cleland - 2022 Jul 28.



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ENVIRONMENTAL HEALTH RESEARCH SCAN

SELECTED NCCEH PUBLICATIONS

- James K. Benzene contamination in sunscreen: Not worth getting burned [blog]. Vancouver, BC: National Collaborating Centre for Environmental Health; 2022 Jul 20. Available from: https://ncceh.ca/content/blog/benzene-contamination-sunscreen-not-worth-getting-burned.
- National Collaborating Centre for Environmental Health. Health checks during extreme heat events
 [guidance document]. Vancouver, BC: National Collaborating Centre for Environmental Health;
 2022 Jun 22. Available from: https://ncceh.ca/documents/guide/health-checks-during-extreme-heat-events.
- 3. National Collaborating Centre for Environmental Health. June research scan with COVID-19 sections [blog]. Vancouver, BC: NCCEH; 2022 Jun 15. Available from: https://ncceh.ca/content/blog/june-research-scan-covid-19-sections-0.
- 4. National Collaborating Centre for Environmental Health. **Legionella [topic page]**. Vancouver, BC: NCCEH; 2022 Jun. Available from: https://ncceh.ca/environmental-health-in-canada/health-agency-projects/legionella.
- 5. National Collaborating Centre for Environmental Health. **NCCEH eNews (June 2021): Preventing injuries and deaths during extreme heat events; more...** Vancouver, BC: NCCEH; 2022 Jun 24. Available from: https://tinyurl.com/25ytw2xu.
- 6. National Collaborating Centre for Environmental Health. **Pools, hot tubs, and other treated**recreational water venues [topic page]. Vancouver, BC: NCCEH; 2022 Jul 20. Available from:
 https://ncceh.ca/environmental-health-in-canada/health-agency-projects/pools-hot-tubs-and-other-treated-recreational.
- National Collaborating Centre for Environmental Health. Coastal waters, fresh water and other
 untreated recreational water venues [topic page]. Vancouver, BC: NCCEH; 2022 Jul 20.
 Available from: https://ncceh.ca/environmental-health-in-canada/health-agency-projects/coastal-waters-fresh-water-and-other.
- 8. O'Keeffe J. Climate change, coastal communities, and food from the sea [blog]. Vancouver, BC: National Collaborating Centre for Environmental Health; 2022 Jul 20. Available from: https://ncceh.ca/content/blog/climate-change-coastal-communities-and-food-sea.
- Rosenkrantz L, Eykelbosh A. Monkeypox in personal service establishments: Low risk, but know the signs [blog]. Vancouver, BC: National Collaborating Centre for Environmental Health; 2022 Jun 22. Available from: https://ncceh.ca/content/blog/monkeypox-personal-service-establishments.

WEBINARS

- Atkinson D, Quinlan L. Climate change and Indigenous Peoples' health in Canada [webinar].
 Vancouver, BC: National Collaborating Centre for Environmental Health; 2022 Jun 8. Available
 from: https://ncceh.ca/content/webinar-recording-climate-change-and-indigenous-peoples-health-canada.
- Cleland S. Daily and hourly exposure to PM2.5 and wildfire smoke and cognitive performance in a brain-training game: A longitudinal study of US adults [webinar]. Vancouver, BC: National Collaborating Centre for Environmental Health; 2022 Jul 28. Available from: https://ncceh.ca/content/ncceh-environmental-health-seminar-series.



JOURNAL ARTICLES

- Cleland SE, Wyatt LH, Wei L, Paul N, Serre ML, West JJ, et al. Short-term exposure to wildfire smoke and PM2.5 and cognitive performance in a brain-training game: a longitudinal study of U.S. adults. Environ Health Perspect. 2022;130(6):067005. Available from: https://ehp.niehs.nih.gov/doi/abs/10.1289/EHP10498.
- White R, Anderson S, Booth J, Braich G, Draeger C, Fei C, et al. The unprecedented Pacific Northwest heatwave of June 2021. Research Square. 2022. Available from: https://assets.researchsquare.com/files/rs-1520351/v1 covered.pdf?c=1650995558.

INDIGENOUS ENVIRONMENTAL HEALTH

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- Al-Hajj S, Desapriya E, Pawliuk C, Garis L, Pike I. Interventions for preventing residential fires in vulnerable neighbourhoods and Indigenous communities: a systematic review of the literature. Int J Environ Res Public Health. 2022;19(9). Available from: https://doi.org/10.3390/ijerph19095434.
- Beausoleil D, Munkittrick K, Dubé MG, Wyatt F. Essential components and pathways for developing Indigenous community-based monitoring: Examples from the Canadian oil sands region. Integr Environ Assess Manag. 2022;18(2):407-27. Available from: https://setac.onlinelibrary.wiley.com/doi/abs/10.1002/ieam.4485.
- 4. Caughey A, Kilabuk P, Sanguya I, Doucette M, Jaw M, Allen J, et al. **Niqivut Silalu Asijjipalliajuq: Building a community-led food sovereignty and climate change research program in Nunavut, Canada.** Nutrients. 2022;14(8). Available from: https://doi.org/10.3390/nu14081572.
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- 6. Miltenburg E, Neufeld HT, Anderson K. **Relationality, responsibility and reciprocity: cultivating Indigenous food sovereignty within urban environments**. Nutrients. 2022;14(9). Available from: https://doi.org/10.3390/nu14091737.
- 7. Mirzaei O, Natcher DC. Recreational tobacco consumption and food insecurity among First Nations in Canada. Can J Public Health. 2022:1-10. Available from: https://doi.org/10.17269/s41997-022-00650-8.
- Reed G, Brunet ND, McGregor D, Scurr C, Sadik T, Lavigne J, et al. Toward Indigenous visions of nature-based solutions: an exploration into Canadian federal climate policy. Climate Policy (Earthscan). 2022;22(4):514-33. Available from: https://doi.org/10.1080/14693062.2022.2047585.
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- Ghezeljeh A, Gutberlet J, Cloutier D. Recent challenges and new possibilities with urban agriculture in Victoria, British Columbia. Can Geogr. 2022:1. Available from: https://doi.org/10.1111/cag.12783.
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- 3. Seguin R, Lefsrud MG, Delormier T, Adamowski J, Fyles H. **Interregional differences in agricultural development across Circumpolar Canada**. Arctic Journal. 2022;75(1):38-54. Available from: https://journalhosting.ucalgary.ca/index.php/arctic/article/view/74717.
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 http://cdphready.org/preparation-and-planning-for-bioterrorism-emergencies/.

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- 2. Dong Y, Liu H. **Does green space influence assaults? Evidence from Toronto, Canada**. Urban For Urban Green. 2022;68. Available from: https://doi.org/10.1016/j.ufug.2022.127481.
- Falkowski TB, Jorgensen B, Rakow DA, Das A, Diemont SAW, Selfa T, et al. "connecting with good people and good plants": community gardener experiences in New York State During the COVID-19 pandemic. Frontiers in Sustainable Food Systems. 2022;6. Available from: https://www.frontiersin.org/article/10.3389/fsufs.2022.854374.
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- 6. Perrotta K. **Public health and planning co-creating 15-minute neighbourhoods in Ottawa**. Ottawa, ON: Canadian Public Health Association; 2022 Jun. Available from: https://www.cpha.ca/public-health-and-planning-co-creating-15-minute-neighbourhoods-ottawa.
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CHEMICAL AGENTS - METALS, GENERAL

General

- Arctic Monitoring and Assessment Programme. AMAP Assessment 2021: Mercury in the Arctic Arctic Monitoring and Assessment Programme (AMAP). Norway: Arctic Monitoring And
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 https://policycommons.net/artifacts/2472703/amap-assessment-2021/.
- Ding N, Karvonen-Gutierrez CA, Mukherjee B, Calafat AM, Harlow SD, Park SK. Per- and Polyfluoroalkyl Substances and Incident Hypertension in Multi-Racial/Ethnic Women: The Study of Women's Health Across the Nation. Hypertension. 2022:10.1161/HYPERTENSIONAHA.121.18809. Available from: https://www.ahajournals.org/doi/abs/10.1161/HYPERTENSIONAHA.121.18809.
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CHEMICAL AGENTS – PESTICIDES

CHEMICAL AGENTS – SHALE GAS

CHILDREN'S ENVIRONMENTAL HEALTH

- Chen F, Tao C, Hamouda MA. Children's Exposure to Lead from Tap Water in Child Care Centers and Estimation of Blood Lead Levels. Exposure and Health. 2022. Available from: https://doi.org/10.1007/s12403-022-00493-1.
- Green R, Lanphear B, Phipps E, Goodman C, Joy J, Rihani S, et al. Development and Validation of the Prevention of Toxic Chemicals in the Environment for Children Tool: A Questionnaire for Examining the Community's Knowledge of and Preferences Toward Toxic Chemicals and Children's Brain Development. Frontiers in public health. 2022;10:863071. Available from: https://doi.org/10.3389/fpubh.2022.863071.
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CLIMATE CHANGE

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- 2. Anderson V, Gough WA. **Nature-based cooling potential: a multi-type green infrastructure evaluation in Toronto, Ontario, Canada**. Int J Biometeorol. 2022;66(2):397-410. Available from: https://link.springer.com/article/10.1007/s00484-021-02100-5.
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COVID-19, OMICRON - SEE NEXT PAGE



COVID-19 ADDITIONAL TOPICS & GUIDANCE



CONTENTS

- GUIDANCE (cleaning, face masks, hand hygiene, more)
- HOMELESS, VULNERABLE POPULATIONS, HOUSING
- MENTAL HEALTH
- MULTI-UNIT BUILDINGS
- OCCUPATIONAL GUIDANCE, MISC
- PUBLIC FACILITIES
- SURVIVAL TIME
- TRANSIT, TRANSPORTATION
- TRANSMISSION



GUIDANCE (for 'Occupational Guidance' – see separate topic heading)

Face Masks, Distancing, etc

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MENTAL HEALTH

General

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MULTI-UNIT BUILDINGS

OCCUPATIONAL GUIDANCE

Occupational

PUBLIC FACILITIES

Transportation (see separate category, 'Transit, Transportation'

SURVIVAL TIME

TRANSIT, TRANSPORTATION

TRANSMISSION

Singing, Wind Instruments, Theatre

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