2022 EH Scan



ENVIRONMENTAL HEALTH RESEARCH SCAN

WITH COVID-19 SECTIONS VOL 5 (5) MAY 2022



CONTENTS

- STAFF
- INDIGENOUS ENVIRONMENTAL HEALTH
- AGRICULTURAL OPERATIONS
- BIOLOGICAL AGENTS
- BUILT ENVIRONMENT
- CHEMICAL AGENTS METALS, GENERAL
- CHEMICAL AGENTS PESTICIDES
- CHEMICAL AGENTS SHALE GAS
- CHILDREN'S ENVIRONMENTAL HEALTH
- CLIMATE CHANGE
- COMMUNICABLE AND INFECTIOUS DISEASES
- DRINKING WATER
- EMERGENCY PREPAREDNESS
- ENVIRONMENTAL HEALTH SURVEILLANCE
- ENVIRONMENTAL PLANNING
- <u>FOOD</u>

- GENERAL
- HEALTH EQUITY
- HEALTH IMPACT ASSESSMENT
- INDOOR AIR
- NUISANCE CONTROL
- OUTDOOR AIR
- PERSONAL SERVICE ESTABLISHMENTS
- PEST CONTROL
- PHYSICAL AGENTS
- RADIATION
- RECREATIONAL AND SURFACE WATER
- RISK ASSESSMENT, COMMUNICATION
- SENIORS' ENVIRONMENTAL HEALTH
- TOBACCO
- WASTE
- ZOONOSES

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 This research scan is not peer reviewed; it does not cover all research, news, and information, and NCCEH is not responsible for the accuracy of the content from media or databases.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

Listening to Canadians about environmental noise [blog] Kelsey James, Environmental Health Knowledge Translation Scientist, NCCEH

"This blog provides an overview of current knowledge, attitudes, and trends of environmental noise exposure and discusses the how environmental health practitioners can contribute to proactive noise management planning."



Avian influenza A(H5N1) 2022 outbreak in Canada [blog] Juliette O'Keeffe, Knowledge Translation Scientist, NCCEH

"The current rise in cases from Avian influenza A(H5N1) has led to bird deaths from the virus and culling of several million poultry and egg producing birds in Canada. There is concern about where the virus is spreading, how it is being tracked in Canada, and what the risks are to humans."



Indoor CO2 sensors for COVID-19 risk mitigation: current guidance and limitations [guidance document]

Angela Eykelbosh, Knowledge Translation Scientist, NCCEH

"Building on a previous NCCEH document in which we explored some of the concerns around CO_2 monitoring as a public health tool, the scope was expanded to include all public health guidance regarding CO_2 monitoring by occupants to address ventilation adequacy during pandemic conditions."



Public health messaging for wildfire smoke: cast a wide net [journal article]

Sarah Henderson, Scientific Director, Environmental Health Services, BCCDC, and coauthors

"...Environmental and public health agencies should continue to share wildfire smoke messages using diverse methods, ideally tailoring the messages and methods to specific populations at risk for exposure and health effects."



Transportation Planning for Equity and Healthy Communities [NCCEH Healthy Built Environment Forum, May 5, 2022 webinar] Todd Litman

"This webinar examines how transportation planning decisions affect social equity and public health, ways to evaluate these impacts, and better align transportation policies with community goals"





ENVIRONMENTAL HEALTH RESEARCH SCAN

SELECTED PUBLICATIONS

- 1. James K. Listening to Canadians about environmental noise [blog]. Vancouver, BC: National Collaborating Centre for Environmental Health; 2022 Apr 19. Available from: https://ncceh.ca/content/blog/listening-canadians-about-environmental-noise.
- 2. National Collaborating Centre for Environmental Health. Marine shellfish poisoning [topic page]. Vancouver, BC: NCCEH; 2022 Apr. Available from: https://ncceh.ca/environmental-health-in-canada/health-agency-projects/marine-shellfish-poisoning%20refers%20to,feed%20on%20toxin%2Dproducing%20phytoplankton.
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- National Collaborating Centre for Environmental Health. April research scan with COVID-19 sections
 [blog]. Vancouver, BC: NCCEH; 2022 Apr 21. Available from:
 https://ncceh.ca/content/blog/april-research-scan-covid-19-sections-0.
- 6. O'Keeffe J. **Avian influenza A(H5N1) 2022 outbreak in Canada [blog]**. Vancouver, BC: National Collaborating Centre for Environmental Health; 2022 May 12. Available from: https://ncceh.ca/content/blog/avian-influenza-ah5n1-2022-outbreak-canada.
- 7. Shellington EM, Nguyen PDM, Rideout K, Barn P, Lewis A, Baillie M, et al. **Public health messaging for wildfire smoke: cast a wide net**. Frontiers in Public Health. 2022;10. Available from: https://www.frontiersin.org/article/10.3389/fpubh.2022.773428.

Webinars

- Bush K, Anne-Marie N. Radon and Lung Health: What Health Care Providers Need to Know [webinar]. Treaty 6 territory: Lung Sask; 2022 04 Apr 13. Available from: https://www.lungsask.ca/events/166.
- Emelko M. Fires, floods & hurricanes: protecting Canadians by identifying and managing threats to safe drinking water [webinar]. Vancouver, BC: National Collaborating Centre for Environmental Health; 2022 May 26. Available from: https://ncceh.ca/content/ncceh-environmental-health-seminar-series.
- 3. Eyquem J, Feltmate B. Irreversible extreme heat: protecting Canadians and communities from a lethal future [webinar]. Intact Centre on Climate Adaptation, University of Waterloo; 2022 Apr 27. Available from: https://ncceh.ca/content/webinar-recording-irreversible-extreme-heat-protecting-canadians-and-communities-lethal.
- 4. Gregg E. **Measuring success in food systems planning [webinar]**. Intact Centre on Climate Adaptation, University of Waterloo; 2022 Apr 27. Available from: https://ncceh.ca/content/webinar-recording-measuring-success-food-systems-planning.



5. Litman T. Transportation Planning for Equity and Healthy Communities [NCCEH Healthy Built Environment Forum, May 5, 2022 webinar]. Vancouver, BC: National Collaborating Centre for Environmental Health; 2022 May 5. Available from: https://ncceh.ca/content/webinar-recording-transportation-planning-equity-and-healthy-communities.

INDIGENOUS ENVIRONMENTAL HEALTH

- First Nations Health Authority. Paddling Together: First Nations Health Authority Health and Wellness Plan. West Vancouver, BC: FNHA; 2022. Available from: https://www.fnha.ca/Documents/FNHA-Summary-Service-Plan-2022-2023.pdf.
- 2. Greenwood M, Atkinson D, Sutherland J. **Supporting health equity for First Nations, Inuit and Métis peoples**. Canada communicable disease report = Releve des maladies transmissibles au Canada. 2022;48(4):119-23. Available from: https://pubmed.ncbi.nlm.nih.gov/35480702.

AGRICULTURAL OPERATIONS

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- 12. Zhang J, Zhou T, Zhang T, Liao M, Qi W. **Survivability of H5N8 mixed wild bird droppings in different conditions**. The Lancet Microbe. 2022;3(5):e332. Available from: https://doi.org/10.1016/S2666-5247(22)00031-3.

BIOLOGICAL AGENTS

BUILT ENVIRONMENT

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- 9. Schröder J, Moebus S, Skodra J. **Selected Research Issues of Urban Public Health**. Int J Environ Res Public Health. 2022;19(9):5553. Available from: https://www.mdpi.com/1660-4601/19/9/5553.
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CHEMICAL AGENTS – METALS, GENERAL

General

- Costello E, Rock S, Stratakis N, Eckel SP, Walker DI, Valvi D, et al. Exposure to per- and Polyfluoroalkyl Substances and Markers of Liver Injury: A Systematic Review and Meta-Analysis. Environ Health Perspect. 2022;130(4):046001. Available from: https://ehp.niehs.nih.gov/doi/abs/10.1289/EHP10092.
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CHEMICAL AGENTS – PESTICIDES

CHEMICAL AGENTS – SHALE GAS

CHILDREN'S ENVIRONMENTAL HEALTH

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 of Canadian Child Care Professionals. Toronto, ON: Canadian Partnership for Children's Health
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CLIMATE CHANGE

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- Eyquem J, Feltmate B. Irreversible extreme heat: protecting Canadians and communities from a lethal future. Intact Centre on Climate Adaptation, University of Waterloo; 2022 04 01 Apr 27. Available from: https://www.intactcentreclimateadaptation.ca/wp-content/uploads/2022/04/UoW ICCA 2022 04-Irreversible-Extreme-Heat.pdf.
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- 6. van den Broek d'Obrenan H, Huxley R. **Measuring what matters: supporting cities in tackling climate and health challenges**. The Lancet Global Health. 2022;10(6):e788-e9. Available from: https://doi.org/10.1016/S2214-109X(22)00198-X.

COMMUNICABLE AND INFECTIOUS DISEASES

See Covid 19 subsections in this issue and in the COVID-19 Additional Topics and Guidance section at the end of this issue (e.g., Occupational Guidance, Transit, Transmission)

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 Health Rep. 2021 04 20. Available from: https://www150.statcan.gc.ca/n1/pub/82-003-x/2022004/article/00003-eng.htm.
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DRINKING WATER

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ENVIRONMENTAL HEALTH SURVEILLANCE

ENVIRONMENTAL PLANNING

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- 3. Giles-Corti B, Moudon AV, Lowe M, Adlakha D, Cerin E, Boeing G, et al. **Creating healthy and sustainable cities: what gets measured, gets done**. The Lancet Global Health. 2022;10(6):e782-e5. Available from: https://doi.org/10.1016/S2214-109X(22)00070-5.



- 4. Giles-Corti B, Moudon AV, Lowe M, Cerin E, Boeing G, Frumkin H, et al. What next? Expanding our view of city planning and global health, and implementing and monitoring evidence-informed policy. The Lancet Global Health. 2022;10(6):e919-e26. Available from: https://doi.org/10.1016/S2214-109X(22)00066-3.
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FOOD

Safety

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Services. Int J Environ Res Public Health. 2022;19(9):5523. Available from: https://www.mdpi.com/1660-4601/19/9/5523.

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- 8. Talukder B, Ganguli N, vanLoon GW. **Climate change-related foodborne zoonotic diseases and pathogens modeling**. J Climate Change Health. 2022;6:100111. Available from: https://www.sciencedirect.com/science/article/pii/S2667278221001085.

Microplastics

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GENERAL

HEALTH EQUITY

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HEALTH IMPACT ASSESSMENT

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COVID-19 ADDITIONAL TOPICS & GUIDANCE



CONTENTS

- <u>GUIDANCE</u> (cleaning, face masks, hand hygiene, more)
- HOMELESS, VULNERABLE POPULATIONS, HOUSING
- MENTAL HEALTH
- MULTI-UNIT BUILDINGS
- POLICY, GENERAL
- PUBLIC FACILITIES
- SURVIVAL TIME
- TRANSIT, TRANSPORTATION
- TRANSMISSION



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