2022 EH Scan



ENVIRONMENTAL HEALTH RESEARCH SCAN

WITH COVID-19 SECTIONS VOL 6 (1) JANUARY 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 This research scan is not peer reviewed; it does not cover all research, news, and information, and NCCEH is not responsible for the accuracy of the content from media or databases.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

Small drinking water systems and private wells [topic page] Juliette O'Keeffe, Knowledge Translation Scientist, NCCEH

"The resources listed here are intended to assist environmental and public health professionals and those responsible for managing Small Drinking Water Systems and Private Water Systems to:

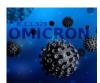
- Understand the factors influencing the safety of drinking water in small systems including key water quality parameters;
- Identify the approaches to assessing and reducing health risks from drinking water in small systems;
- Identify the steps needed to respond to emergencies and how to mitigate adverse impacts;
- Understand some of the challenges facing small systems in First Nations' communities."



The Omicron wave – communicating during uncertainty [blog]

Juliette O'Keeffe and Anne-Marie Nicol, Knowledge Translation Scientists, NCCEH

"The dynamic nature of the Omicron variant and a sudden shift in the trajectory of the pandemic necessitates a return to public health best practices. Even when much is still unknown, frequent communication is essential, and may require public health professionals to revisit effective communication strategies."... more



Infection Prevention and Control infractions and Ontario Personal Service Settings – What were the common issues in 2018 and what can we do differently? [webinar]

Paphitis K, Ryding D.

"...an overview of infection prevention and control infractions"... more



NCCEH eNews (Dec 2021): Creating healthy community places and spaces with individuals with diverse abilities... more National Collaborating Centre for Environmental Health

"..includes new blogs, topics pages"....more



December research scan with COVID-19 sections [blog]

National Collaborating Centre for Environmental Health

"This monthly Research Scan highlights recent environmental health publications by topic and provides easy access to article abstracts and report summaries to support public health professionals, researchers, planners, students, and others working in public health."...more





ENVIRONMENTAL HEALTH RESEARCH SCAN

SELECTED NCCEH PUBLICATIONS

- National Collaborating Centre for Environmental Health. Small drinking water systems and private wells [topic page]. Vancouver, BC: National Collaborating Centre for Environmental Health; 2021 Dec 10. Available from: https://ncceh.ca/environmental-health-in-canada/health-agency-projects/small-drinking-water-systems-and-private.
- National Collaborating Centre for Environmental Health. NCCEH eNews (Dec 2021): Creating healthy community places and spaces with individuals with diverse abilities... more...
 Vancouver, BC: NCCEH; 2021 Dec 16. Available from: https://tinyurl.com/5n7yezmd.
- National Collaborating Centre for Environmental Health. December research scan with COVID-19 sections [blog]. Vancouver, BC: NCCEH; 2021 Dec 16. Available from: https://ncceh.ca/content/blog/december-research-scan-covid-19-sections-0.
- 4. O'Keeffe J, Eykelbosh A. **Understanding transmission of SARS-CoV-2 in the ongoing COVID-19**pandemic [evidence review]. Vancouver, BC: National Collaborating Centre for Environmental Health; 2021 Dec 15. Available from: https://ncceh.ca/documents/evidence-review/understanding-transmission-sars-cov-2-ongoing-covid-19-pandemic.
- 5. O'Keeffe J, Nicol A-M. **The Omicron wave communicating during uncertainty [blog]**. Vancouver, BC: NCCEH; 2021 Dec 21. Available from: https://ncceh.ca/content/blog/omicron-wave-communicating-during-uncertainty.

INDIGENOUS ENVIRONMENTAL HEALTH

- Andrade-Rivas F, Afshari R, Yassi A, Mardani A, Taft S, Guttmann M, et al. Industrialization and food safety for the Tsleil-Waututh Nation: An analysis of chemical levels in shellfish in Burrard Inlet. Environ Res. 2022;206:112575. Available from: https://www.sciencedirect.com/science/article/pii/S0013935121018764.
- 2. Lane K, Fuller M, Dyment T, Gagnon G. Co-development of a risk assessment tool for use in First Nations water supply systems: A key step to water safety plan implementation. Int J Hyg Environ Health. 2022;240:113916. Available from: https://www.sciencedirect.com/science/article/pii/S1438463921002315.
- 3. Palmer J. WAMPUM: An Indigenous-Designed Path to Sea Level Rise Adaptation. EOS; 2021 [Dec 16]; Available from: <a href="https://eos.org/articles/wampum-an-indigenous-designed-path-to-sea-level-rise-adaptation?utm-source=ActiveCampaign&utm-medium=email&utm_content=Science+news%3A++SCIENCESATURDAY LEAD TITLE?utm_campaign=Science+Saturday+Email+-+Outlook.
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AGRICULTURAL OPERATIONS

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- Food and Agriculture Association of the United Nations. Assessment of agricultural plastics and their sustainability: A call for action. Rome, Italy: FAO; 2021. Available from: https://doi.org/10.4060/cb7856en.
- 3. Jägermeyr J, Müller C, Ruane AC, Elliott J, Balkovic J, Castillo O, et al. **Climate impacts on global agriculture emerge earlier in new generation of climate and crop models**. Nature Food. 2021;2(11):873-85. Available from: https://doi.org/10.1038/s43016-021-00400-y.

BIOLOGICAL AGENTS

BUILT ENVIRONMENT

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- 3. Feng X, Astell-Burt T, Standl M, Flexeder C, Heinrich J, Markevych I. **Green space quality and adolescent mental health: do personality traits matter?** Environ Res. 2021:112591. Available from: https://www.sciencedirect.com/science/article/pii/S0013935121018922.
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- Klicnik MI, Cullen MJD, Doiron DD, Barakat DC, Ardern DC, Rudoler DD, et al. Leisure sedentary time and physical activity are higher in neighbourhoods with denser greenness and better built environments: An analysis of the Canadian Longitudinal Study on Aging. Appl Physiol Nutr Metab. 2022. Available from: https://cdnsciencepub.com/doi/abs/10.1139/apnm-2021-0438.



- 9. Koda E, Rybak-Niedziółka K, Winkler J, Černý M, Osiński P, Podlasek A, et al. **Space Redevelopment of Old Landfill Located in the Zone between Urban and Protected Areas: Case Study**. Energies. 2022;15(1):146. Available from: https://www.mdpi.com/1996-1073/15/1/146.
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- 11. Litman T. **Evaluating Public Transit Benefits and Costs. Best Practices Guidebook**. Victoria, BC: Victoria Transport Policy Institute; 2021 Dec. Available from: https://www.vtpi.org/tranben.pdf.
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CHEMICAL AGENTS - METALS, GENERAL

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- 2. Public Health Agency of Canada. **Asbestos in drinking water**. Ottawa, ON: PHAC; 2021 Nov. Available from: https://www.canada.ca/en/health-canada/services/publications/healthy-living/asbestos-drinking-water-infographic-2021.html.
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CHEMICAL AGENTS – PESTICIDES

CHEMICAL AGENTS – SHALE GAS

CHILDREN'S ENVIRONMENTAL HEALTH

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- Li X, Vanderloo LM, Keown-Stoneman CDG, Cost KT, Charach A, Maguire JL, et al. Screen Use and Mental Health Symptoms in Canadian Children and Youth During the COVID-19 Pandemic. JAMA Network Open. 2021;4(12):e2140875-e. Available from: https://doi.org/10.1001/jamanetworkopen.2021.40875.
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- 1. Arctic Program. **Arctic report card 2021**. US Department of Commerce; 2021. Available from: https://arctic.noaa.gov/Report-Card/Report-Card-2021.
- 2. Aune KT, Davis MF, Smith GS. Extreme Precipitation Events and Infectious Disease Risk: A Scoping Review and Framework for Infectious Respiratory Viruses. Int J Environ Res Public Health. 2022;19(1):165. Available from: https://www.mdpi.com/1660-4601/19/1/165.
- 3. Ban N, Salomon A, Lepofsky D. Investigating and informing Indigenous marine monitoring and management as climate change adaptation strategies. Halifax NS: Meopar, Government of Canada, Networks of Centres of Excellence; 2021. Available from: https://meopar.ca/investigating-and-informing-indigenous-marine-monitoring-and-management-as-climate-change-adaptation-strategies/.
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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)

DRINKING WATER

- Gleason JA, Cohn PD. A review of legionnaires' disease and public water systems Scientific considerations, uncertainties and recommendations. Int J Hyg Environ Health. 2022;240:113906. Available from: https://www.sciencedirect.com/science/article/pii/S1438463921002212.
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 Brunswick Progress Report December 2021. Fredericton, NB: Government of New Brunswick;
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EMERGENCY PREPAREDNESS

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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



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