2021 EH Scan



National Collaborating Centre for Environmental Health

Centre de collaboration nationale en santé environnementale

ENVIRONMENTAL HEALTH RESEARCH SCAN

WITH COVID-19 SECTIONS VOL 5 (2) FEBRUARY 2021



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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. "*We focus on health risks associated with the physical environment and identify evidence-based interventions to mitigate those risks*." This review is not official or 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. How to access the items? Click on the link related to each entry and it should take you to the item. 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** at the end of this issue.

EDITOR PICKS

Mink farming and SARS-CoV-2: Staying vigilant at the humananimal interface [blog]

Michael Lee, Environmental Epidemiologist, BC Centre for Disease Control

"In light of the potential risks associated with viral transmission to farmed mink, it is clear that strong efforts to administer, evaluate, and enforce measures to prevent the movement of SARS-CoV-2 onto and off of mink farms are paramount."

Community refrigerators in the time of a pandemic: food-sharing safety [blog]

Olivia Van Osch, Public Health Agency of Canada Student Outbreak Investigator

"With food-sharing programs gaining more popularity, public health professionals need to be prepared to mitigate potential food safety risks. Items to consider when reviewing similar programs include: ..." more

Communicating appropriate cleaning and disinfection practices and health risks in environmental public health practice Tina Chen, NCCEH Knowledge Translation Scientist

This article will provide a brief discussion of cleaning and disinfection products and practices, potential health risks due to misuse and overuse, and how public health inspectors may play a role in communication and education with various stakeholders."

Health in impact assessments for natural resource and large infrastructure developments – opportunities for public health [blog] Shirra Freeman, NCCEH Knowledge Translation Scientist

"In 2019 Canada put in place new legislation, the Impact Assessment (IA) Act. [...] The implications of this new legislation for the use of HIA and the role of environmental public health practice in IAs are outlined in this blog."

Nimble, efficient and evolving: the rapid response of the National Collaborating Centres to COVID-19 in Canada [commentary] Maureen Dobbins, Alejandra Dubois, Donna Atkinson, Olivier Bellefleur, Claire Betker, Margaret Haworth-Brockman, Lydia Ma

"This paper offers an overview of the NCCs as an example of public health knowledge mobilization in Canada and showcases the NCCs' contribution to the COVID-19 response while reflecting on the numerous challenges encountered."











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ENVIRONMENTAL HEALTH RESEARCH SCAN

SELECTED STAFF PUBLICATIONS

NCCEH

- Chen T. Communicating appropriate cleaning and disinfection practices and health risks in environmental public health practice. Environ Health Rev. 2021;63(4):96-100. Available from: <u>https://pubs.ciphi.ca/doi/abs/10.5864/d2020-026</u>.
- Freeman S. Health in impact assessments for natural resource and large infrastructure developments – opportunities for public health [blog]. Vancouver, BC: National Collaborating Centre for Environmental Health; 2021 Feb 24. Available from: <u>https://ncceh.ca/content/blog/health-impact-assessments-natural-resource-and-largeinfrastructure-developments</u>.
- Lee M. Mink farming and SARS-CoV-2: Staying vigilant at the human-animal interface [blog]. Vancouver, BC: National Collaborating Centre for Environmental Health; 2021 Jan 18. Available from: <u>https://ncceh.ca/content/blog/mink-farming-and-sars-cov-2-staying-vigilant-human-animalinterface</u>.
- National Collaborating Centre for Environmental Health. January research scan with COVID-19 sections [blog]. Vancouver, BC: NCCEH; 2021 Jan 20. Available from: <u>https://ncceh.ca/content/blog/january-research-scan-covid-19-sections</u>.
- National Collaborating Centre for Environmental Health. NCCEH eNews (January 2021): Looking for COVID-19 clues in our sewers. Vancouver, BC: NCCEH; 2021 Jan. Available from: <u>https://tinyurl.com/yy927yjt</u>.
- O'Keeffe J, Eykelbosh A. Understanding the uses and limitations of ventilation and air cleaning in COVID-19-risk mitigation [presentation]. Vancouver, BC: British Columbia Centre for Disease Control - Grand Round Series; 2021 Jan 12. Available from: <u>https://nexuswebcast.mediasite.com/Mediasite/Showcase/bc-cdc-</u> showcase/Presentation/9ed7053ca26a475fa4d6c28a4c275f451d.
- Van Osch O. Community refrigerators in the time of a pandemic: food-sharing safety [blog]. Vancouver, BC: National Collaborating Centre for Environmental Health; 2021 Jan 20. Available from: <u>https://ncceh.ca/content/blog/community-refrigerators-time-pandemic-food-sharing-safety</u>.
- Vitkin N. Creative knowledge translation using infographics [blog]. Vancouver, BC: National Collaborating Centre for Environmental Health; 2021 Feb 22. Available from: <u>https://ncceh.ca/content/blog/creative-knowledge-translation-using-infographics</u>.

Other NCCs

- Diallo T. Tools and Methods for Integrating Health into Climate Change Adaptation and Mitigation Policies and Strategies Montreal, QC: National Collaborating Centre for Healthy Public Policy; 2021 Jan. Available from: <u>http://www.ncchpp.ca/docs/2021-Climate-Change-Tools-And-Methods-Integrating-Health.pdf</u>.
- Dobbins M, Dubois A, Atkinson D, Bellefleur O, Betker C, Haworth-Brockman M, et al. Commentary

 Nimble, efficient and evolving: the rapid response of the National Collaborating Centres to COVID-19 in Canada. Ottawa, ON: Public Health Agency of Canada; 2021 Feb 21. Available



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from: <u>https://www.canada.ca/en/public-health/services/reports-publications/health-promotion-chronic-disease-prevention-canada-research-policy-practice/vol-41-no-5-2021/rapid-response-national-collaborating-centres-covid-19-canada.html.</u>

- Kamwa Ngne A, Morrison V. Public Policy Competencies for Public Health: A Review of the Literature. Montreal, QC: National Collaborating Centre for Healthy Public Policy (NCCHPP), Institut national de santé publique; 2021 Feb. Available from: <u>http://www.ncchpp.ca/172/Publications.ccnpps?id article=2099&utm source=Cyberimpact&utm medium=e</u> <u>mail&utm campaign=E--Bulletin-February-2021</u>.
- National Collaborating Centre for Determinants of Health. Conversation series: From risk to resilience: A health equity approach to pandemic preparedness, response and recovery. Antigonish, NS: St. Francis Xavier University; 2021 02 21 Jan 20. Available from: <u>https://nccdh.ca/workshops-events/entry/from-risk-to-resilience</u>.
- National Collaborating Centre for Indigenous Health. Healing in Pandemic Times: Indigenous Peoples, Stigma and COVID-19. Prince George, BC: University of Northern British Columbia; 2021 [updated Jan]; Available from: https://www.nccih.ca/495/Healing in Pandemic Times.nccih?id=319.
- National Collaborating Centre for Infectious Diseases. Infectious Questions: Waste water surveillance as an early detection method for SARS-CoV-2 (Steve E Hrudey). Winnipeg, MB: University of Manitoba; 2021; Available from: <u>https://nccid.ca/podcast-2019-ncov/</u>.
- National Collaborating Centre for Methods and Tools. What is known about the risk of transmission of COVID-19 during musical activities such as singing or playing a wind instrument, and how can these risks be mitigated? Hamilton, ON: McMaster University; 2021 Feb 3. Available from: <u>https://www.nccmt.ca/covid-19/covid-19-rapid-evidence-service/33</u>.

INDIGENOUS ENVIRONMENTAL HEALTH

- Assuah A. Examining the role of and potential for Indigenous and social learning through community-based solid waste management in Canadian First Nation communities. Winnipeg, MB: University of Manitoba; 2020. Available from: <u>https://mspace.lib.umanitoba.ca/handle/1993/35210</u>.
- Cheung JS-J, Hu XF, Parajuli RP, Rosol R, Torng A, Mohapatra A, et al. Health risk assessment of arsenic exposure among the residents in Ndilo, Dettah, and Yellowknife, Northwest Territories, Canada. Int J Hyg Environ Health. 2020;230:113623. Available from: <u>https://www.sciencedirect.com/science/article/pii/S1438463920305691</u>.
- Crown-Indigenous Relations and Northern Affairs Canada. Final Written Submission Baffinland Iron Mines Corporation Mary River Project Phase 2 Proposal. December 24, 2020. Crown-Indigenous Relations and Northern Affairs Canada; 2020. Available from: https://www.nirb.ca/portal/dms/script/dms_download.php?fileid=332329.
- Lane K, Trueman BF, Locsin J, Gagnon GA. Inorganic contaminants in Canadian First Nation community water systems. J Water Health. 2020;18(5):728-40. Available from: <u>https://doi.org/10.2166/wh.2020.185</u>.
- World Wildlife Fund. Policy Brief. Compensation for ship-source oil spills. Modernizing Canada's Marine Liability Regime to Support Indigenous Communities. WWF; 2020 Nov. Available from: https://wwf.ca/wp-content/uploads/2021/01/MLA-2020.pdf.



AGRICULTURAL OPERATIONS

 Gray RS. Agriculture, transportation, and the COVID-19 crisis. Canadian Journal of Agricultural Economics. 2020;68(2):239-43. Available from: <u>https://onlinelibrary.wiley.com/doi/full/10.1111/cjag.12235</u>.

BIOLOGICAL AGENTS

BUILT ENVIRONMENT

- Altomonte S, Allen J, Bluyssen PM, Brager G, Heschong L, Loder A, et al. Ten questions concerning well-being in the built environment. Build Environ. 2020;180:N.PAG-N.PAG. Available from: <u>https://doi.org/10.1016/j.buildenv.2020.106949</u>.
- Canadian Public Health Association. Invest in active travel to create healthy, green and just communities. Ottawa, ON: CPHA; 2021 [updated Feb 23]; Available from: https://www.cpha.ca/invest-active-travel-create-healthy-green-and-just-communities.
- 3. Canadian Urban Environmental Health Research Consortium (CANUE). **GoodScore City**. CANUE; 2021. Available from: <u>https://canue.ca/goodscore-city/</u>.
- Capolongo S, Rebecchi A, Buffoli M, Appolloni L, Signorelli C, Fara GM, et al. COVID-19 and Cities: from Urban Health strategies to the pandemic challenge. A Decalogue of Public Health opportunities. Acta bio-medica : Atenei Parmensis. 2020;91(2):13-22. Available from: https://pubmed.ncbi.nlm.nih.gov/32420919.
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- Danielli S, Coffey T, Ashrafian H, Darzi A. Systematic review into city interventions to address obesity. EClinicalMedicine. 2021. Available from: <u>https://doi.org/10.1016/j.eclinm.2020.100710</u>.
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- 11. Jelks NTO, Jennings V, Rigolon A. **Green Gentrification and Health: A Scoping Review**. Int J Environ Res Public Health. 2021;18(3):907. Available from: <u>https://www.mdpi.com/1660-4601/18/3/907</u>.



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- 12. Kahlmeier S, Boig EA, Fernandez A. C, Smeds E, Benvenuti F, Eriksson U, et al. Assessing the Policy Environment for Active Mobility in Cities—Development and Feasibility of the PASTA Cycling and Walking Policy Environment Score. Int J Environ Res Public Health. 2021;18(3):986. Available from: <u>https://www.mdpi.com/1660-4601/18/3/986</u>.
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- 15. Morley D. **COVID In the city: high-rise buildings, elevator lifts and fallen symbols**. Inter-Asia Cultural Studies. 2020;21(4):614-21. Available from: <u>https://doi.org/10.1080/14649373.2020.1831810</u>.
- 16. Nilsson M, Ebi KL, Campbell-Lendrum D, Kone B, Friberg P. **Covid-19—a rehearsal to build a greener** and healthier society. BMJ. 2021;372:n127. Available from: https://www.bmj.com/content/bmj/372/bmj.n127.full.pdf.
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- 19. Public Health Ontario. **E-Scooter Jurisdictional Scan. Rideshare Program Policies**. Toronto, ON: Queen's Printer for Ontario; 2021 Jan. Available from: <u>https://www.publichealthontario.ca/-/media/documents/e/2021/e-scooters-jurisdictional-scan.pdf?la=en</u>.
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CHEMICAL AGENTS – METALS, GENERAL

General

- Brase RA, Mullin EJ, Spink DC. Legacy and Emerging Per- and Polyfluoroalkyl Substances: Analytical Techniques, Environmental Fate, and Health Effects. Int J Mol Sci. 2021;22(3). Available from: <u>https://www.ncbi.nlm.nih.gov/pubmed/33498193</u>.
- 2. Carlsson P, Breivik K, Brorström-Lundén E, Cousins I, Christensen J, Grimalt JO, et al. Polychlorinated biphenyls (PCBs) as sentinels for the elucidation of Arctic environmental change processes: a comprehensive review combined with ArcRisk project results. Environmental science and



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CHEMICAL AGENTS – PESTICIDES

CHEMICAL AGENTS – SHALE GAS

 Duckers MLA, Baliatsas C, Spreeuwenberg P, Verheij RA, Reifels L, Yzermans CJ. Immediate and long-term health impact of exposure to gas-mining induced earthquakes and related environmental stressors. Eur J Public Health. 2021. Available from: <u>https://www.ncbi.nlm.nih.gov/pubmed/33496336</u>.

CHILDREN'S ENVIRONMENTAL HEALTH

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CLIMATE CHANGE

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COMMUNICABLE AND INFECTIOUS DISEASES

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

 Walensky RP, del Rio C. From Mitigation to Containment of the COVID-19 Pandemic: Putting the SARS-CoV-2 Genie Back in the Bottle. JAMA. 2020;323(19):1889-90. Available from: <u>https://doi.org/10.1001/jama.2020.6572</u>.

DRINKING WATER

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EMERGENCY PREPAREDNESS

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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
- OCCUPATIONAL GUIDANCE, MISC
- PUBLIC FACILITIES
- SURVIVAL TIME
- TRANSIT, TRANSPORTATION
- TRANSMISSION



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

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