2020
EH Scan

National Collaborating Centre for Environmental Health
Centre de collaboration nationale en santé environnementale

ENVIRONMENTAL HEALTH RESEARCH SCAN

WITH COVID-19 Sections

VOL 4 (12) DECEMBER 2020

CONTENTS

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

Cities for all seasons – Considerations for using outdoor urban spaces during the winter [blog]

Shirra Freeman

"…public health experts advocate spending time outside while taking appropriate precautions (e.g., physical distancing, mask-wearing, and hand hygiene) to reap the health benefits of social, cultural and physical activities in fresh air."

Outdoor winter dining during the COVID-19 pandemic [field inquiry]

Angela Eykelbosh

"Regardless of whether dining occurs indoors or outdoors, dining out heightens the risk of COVID-19 transmission, and this risk is primarily due to spending time unmasked with another individual whose health status is unknown. The first and most important means to decrease the risk of dining out is to dine with members of one's own household or bubble..." more

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Environmental surface and air sampling in the context of COVID-19 pandemic [field inquiry]

Tina Chen

"This field inquiry describes a scenario in which SARS-CoV-2 RNA was detected via surface sampling in an office setting. While no cases of COVID-19 have been confirmed in the office space or in the same office building, other occupants in the building are wondering about the validity and implications of the sampling result, and whether environmental sampling should be adopted more widely."

Air cleaning technologies for indoor spaces during the COVID-19 pandemic [blog]

Juliette O'Keeffe

This document addresses the question, "Can air cleaning devices reduce the risks of SARS-CoV-2 transmission indoors?" and provides additional considerations and key messages.

Health Resources for the COVID-19 Pandemic – updated [topic page]

National Collaborating Centre for Environmental Health

NCCEH has prepared a specially curated topic page on Covid-19. Visit http://www.ncceh.ca/environmental-health-canada/ncceh-health-agency-project/desc

EDITOR PICKS, CONTINUED

PHIs in the investigation of environmental drivers of elevated blood lead [journal article]

Esther Tong (right), Tom Kosatsky

"...Here we review the steps involved in investigating higher-level blood lead reports and the roles and limits of PHI involvement in those investigations."

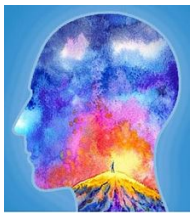
Face shields in public: better than nothing but not good enough [blog]

Angela Eykelbosh

In this blog, several key questions are addressed, including, "What is the evidence for face shields as source control or personal protection?", "What is the role for face shields as a public health tool?", and "What about when a mask or a face shield just won't do?".

Psychosocial impacts of the COVID-19 pandemic: A frame of reference from lessons learned through disasters in Canada [webinar]

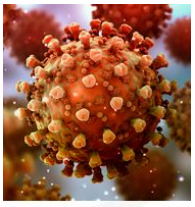
Mélissa Généreux



"This presentation details findings from Canadian-led studies on the psychosocial impacts resulting from communities who experienced large-scale disasters in Canada."

An Introduction to SARS-CoV-2 - updated [evidence review]

Juliette O'Keeffe, Shirra Freeman, Anne-Marie Nicol



"This document has been updated from previous versions published in April and July 2020 to reflect new findings and provide additional information about the virus that may be relevant to the public health response. As new evidence and new interpretations evolve, this document will continue to be updated."

November 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. Covid-19 topics are included.

National Collaborating Centre for Environmental Health
Centre de collaboration nationale en santé environnementale

ENVIRONMENTAL HEALTH RESEARCH SCAN

SELECTED STAFF PUBLICATIONS

NCCEH

1. Chen T. **Environmental surface and air sampling in the context of COVID-19 pandemic [field inquiry]**. Vancouver, BC: National Collaborating Centre for Environmental Health; 2020 Nov 16. Available from: https://ncceh.ca/documents/field-inquiry/environmental-surface-and-air-sampling-context-covid-19-pandemic?utm_source=Cyberimpact&utm_medium=email&utm_campaign=NCCEH-Latest-COVID-19--EH-Resources---November-2020.
2. Eykelbosh A. **Outdoor winter dining during the COVID-19 pandemic [field inquiry]**. Vancouver, BC: National Collaborating Centre for Environmental Health; 2020 Nov 18. Available from: https://ncceh.ca/documents/field-inquiry/outdoor-winter-dining-during-covid-19-pandemic.
3. Eykelbosh A. **Face shields in public: better than nothing, but not good enough [blog]**. Vancouver, BC: National Collaborating Centre for Environmental Health; 2020 12 04 Dec 4. Available from: https://ncceh.ca/content/blog/face-shields-public-better-nothing-not-good-enough.
4. National Collaborating Centre for Environmental Health. **Environmental health resources for the COVID-19 pandemic - updated [topic page]**. Vancouver, BC: National Collaborating Center for Environmental Health; 2020 Nov 17. Available from: https://ncceh.ca/environmental-health-in-canada/health-agency-projects/environmental-health-resources-covid-19.
5. National Collaborating Centre for Environmental Health. **November research scan with COVID-19 sections [blog]**. Vancouver, BC: NCCEH; 2020 Nov 17. Available from: https://ncceh.ca/content/blog/november-research-scan-covid-19-sections.
6. National Collaborating Centre for Environmental Health. **NCCEH eNews (November 2020) : Outdoor Winter Dining during the COVID-19 Pandemic**. Vancouver, BC: NCCEH; 2020 Nov. Available from: https://tinyurl.com/y4s4qxn3.
7. O'Keeffe J. **Air cleaning technologies for indoor spaces during the COVID-19 pandemic [blog]**. Vancouver, BC: National Collaborating Centre for Environmental Health; 2020 12 10 Dec 10. Available from: https://ncceh.ca/content/blog/air-cleaning-technologies-indoor-spaces-during-covid-19-pandemic.
8. O'Keeffe J, Freeman S, Nicol A-M. **An Introduction to SARS-CoV-2 - updated [evidence review]**. Vancouver, BC: National Collaborating Centre for Environmental Health; 2020 Nov 18. Available from: https://ccnse.ca/documents/evidence-review/introduction-au-sras-cov-2.

Webinars

1. Chen T. **Surface cleaning and disinfection in the context of the COVID-19 pandemic [webinar]**. Vancouver, BC: National Collaborating Centre for Environmental Health; 2020 Dec 17. Available from: https://www.eventbrite.ca/e/surface-cleaning-and-disinfection-in-the-context-of-the-covid-19-pandemic-tickets-129610627877.
2. Gailling C. **Healthy social environments: Social connectivity in neighbourhoods [webinar]**. Vancouver, BC: National Collaborating Centre for Environmental Health; 2020 12 16 Dec 16. Available from: https://ncceh.ca/events/ncceh-hbe-forum-healthy-social-environments-social-connectivity-neighbourhoods.

3. Généreux M. **Psychosocial Impacts of the COVID-19 pandemic: A frame of reference from lessons learned through disasters in Canada [webinar]**. Vancouver, BC: National Collaborating Centre for Environmental Health; 2021 01 27 Jan 27. Available from: https://ncceh.ca/events/ncceh-webinar-psychosocial-impacts-covid-19-pandemic-frame-reference-lessons-learned-through.
4. Kasmani A, Li A. **COVID-19 management in personal services settings: Lessons learned from a nail salon outbreak [webinar]**. Vancouver, BC: National Collaborating Centre for Environmental Health; 2020 11 10 Nov 10. Available from: https://ncceh.ca/events/ncceh-webinar-surface-cleaning-and-disinfection-context-covid-19-pandemic.

BCCDC

1. Tong E, Kosatsky T. **PHIs in the investigation of environmental drivers of elevated blood lead**. Environ Health Rev. 2020;63(3):64-6. Available from: https://pubs.ciphi.ca/doi/abs/10.5864/d2020-021.

INDIGENOUS ENVIRONMENTAL HEALTH

1. CAREX Canada. **Community-led projects with First Nations and health system partners**. Burnaby, BC: Simon Fraser University; 2020. Available from: https://www.carexcanada.ca/special-topics/first-nations/.
2. Donatuto J, Campbell L, LeCompte JK, Rohlman D, Tadlock S. The Story of 13 Moons: Developing an Environmental Health and Sustainability Curriculum Founded on Indigenous First Foods and Technologies. Sustainability. 2020;12(21):8913. Available from: https://www.mdpi.com/2071-1050/12/21/8913.
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4. Fenton S, Rydz E, Peters CE, Telfer J. **Community-led projects with First Nations and health system partners**. Burnaby, BC: CAREX Canada, Simon Fraser University; 2020 Jun. Available from: https://www.carexcanada.ca/CAREX_Canada_Night_Shift_Work_Challenges_2020.pdf.
5. Hillier SA, Chaccour E, Al-Shammaa H, Vorstermans J. **Canada's response to COVID-19 for Indigenous Peoples: a way forward?** Can J Public Health. 2020. Available from: https://doi.org/10.17269/s41997-020-00444-w.
6. Júnior JG, Moreira MM, Pinheiro WR, de Amorim LM, Lima CKT, da Silva CGL, et al. The mental health of those whose rights have been taken away: An essay on the mental health of indigenous peoples in the face of the 2019 Coronavirus (2019-nCoV) outbreak. Psychiatry Res. 2020;289:113094. Available from: http://www.sciencedirect.com/science/article/pii/S0165178120309185.
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9. Larsen K, Black P, Palmer AL, Sheppard AJ, Jamal S, Plain S, et al. **Screening-level assessment of cancer risk associated with ambient air exposure in Aamjiwnaang First Nation**. Int J Environ Health Res. 2020:1-12. Available from: https://pubmed.ncbi.nlm.nih.gov/33026840/.

AGRICULTURAL OPERATIONS

BIOLOGICAL AGENTS

BUILT ENVIRONMENT

1. ASHRAE. **Coronavirus (COVID-19) response resources from ashrae and others - infographic**. 2020. Available from: https://www.ashrae.org/technical-resources/building-readiness#epidemic.
2. Capolongo S, Buffoli M, D'Alessandro D, Fara GM, Appolloni L, Signorelli C. **How to foster cities resilient to the COVID-19 pandemic through Urban Health strategies**. Eur J Public Health. 2020;30(Suppl 5):ckaa165.427. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7543603/.
3. Consumers United Allergy National Association. **Indoor environmental quality of sustainable building designs and occupant health**. 2020. Available from: https://cuana.org/2020/11/08/indoor-environmental-quality-of-sustainable-building-designs-and-occupant-health/.
4. DeLange Martinez P, Nakayama C, Young HM. **Age-Friendly Cities During a Global Pandemic**. J Gerontol Nurs. 2020;46(12):7-13. Available from: https://pubmed.ncbi.nlm.nih.gov/33232492/.
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8. Horve PF, Lloyd S, Mhuireach GA, Dietz L, Fretz M, MacCrone G, et al. Building upon current knowledge and techniques of indoor microbiology to construct the next era of theory into microorganisms, health, and the built environment. J Expo Sci Environ Epidemiol. 2020;30(2):219-35. Available from: https://doi.org/10.1038/s41370-019-0157-y.
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CHEMICAL AGENTS – METALS, GENERAL

General

1. Calloway EE, Chiappone AL, Schmitt HJ, Sullivan D, Gerhardstein B, Tucker PG, et al. Exploring Community Psychosocial Stress Related to Per- and Poly-Fluoroalkyl Substances (PFAS) Contamination: Lessons Learned from a Qualitative Study. Int J Environ Res Public Health. 2020;17(23):8706. Available from: https://www.mdpi.com/1660-4601/17/23/8706.
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6. Health Canada. **Report on Human Biomonitoring of Environmental Chemicals in Pooled Samples**. Ottawa, ON: Health Canada; 2020 Dec. Available from: https://www.canada.ca/en/health-canada/services/environmental-workplace-health/environmental-contaminants/human-biomonitoring-environmental-chemicals/report-pooled-samples.html.
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12. Trethewey L. **When Rubber Hits the Road—and Washes Away**. Hakai Magazine. 2020 Nov 24. Available from: https://www.hakaimagazine.com/features/when-rubber-hits-the-road-and-washes-away/?ct=t(RSS_EMAIL_CAMPAIGN).
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Plastics

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CHEMICAL AGENTS – PESTICIDES

1. Larsen K, Black P, Rydz E, Nicol A-M, Peters CE. **Using geographic information systems to estimate potential pesticide exposure at the population level in Canada**. Environ Res. 2020;191:110100. Available from: http://www.sciencedirect.com/science/article/pii/S001393512030997X.

CHEMICAL AGENTS – SHALE GAS

1. Soeder DJ. **Impacts to Human Health and Ecosystems**. Fracking and the Environment: A scientific assessment of the environmental risks from hydraulic fracturing and fossil fuels. Cham: Springer International Publishing; 2021. p. 135-53. Available from: https://doi.org/10.1007/978-3-030-59121-2_8.

CHILDREN'S ENVIRONMENTAL HEALTH

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National Collaborating Centre for Environmental Health

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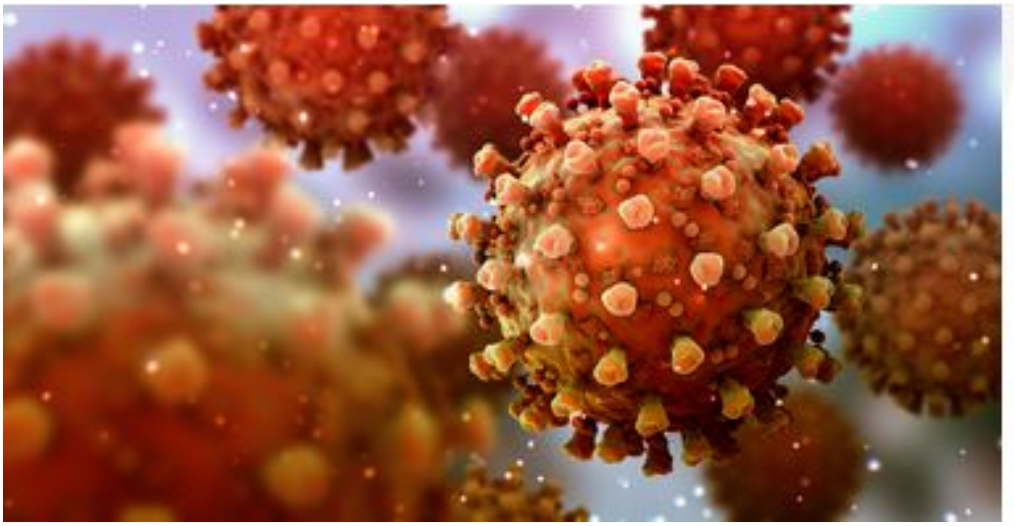
COVID-19 ADDITIONAL TOPICS & GUIDANCE



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BONUS (you are the CHAMP for reading through the list completely – if you have a Dec break, enjoy):

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