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

ENVIRONMENTAL HEALTH RESEARCH SCAN

VOL 3 (12) DECEMBER 2019

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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.

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EDITOR PICKS – TOP 19 FOR 2019

BLOGS

The CanDR2 Network: Improving disaster health outcomes and resilience through data and research

Angela Eykelbosh

This blog highlights some of the issues and the joint efforts of the pan-Canadian Disaster Research Response Initiative (CanDR2)…

Palytoxin – potent but poorly understood

Shirra Freeman

Palytoxin (PLTX) is a potent but poorly understood marine toxin that periodically attracts media attention when poisonings occur…

Rising concern of tick-borne diseases in Canada

Anne-Marie Nicol

The public health threat posed by tick populations in Canada is clearly increasing…

Cyanobacteria - Tapping into the risks to drinking water

Juliette O'Keeffe

What do dog deaths in Fredericton, a State of Emergency in Salem, Oregon, and vacuuming lakes in Florida all have in common?

Keep drinking water safe. New guidelines for PFAS in Canada

Juliette O'Keeffe

Per- and Polyfluoroalkyl Substances, or PFAS, represent a large group of synthetic chemicals that have been in use since the 1950s in industry and consumer products as water, stain, or oil repellent coatings and firefighting foams…

Wading through the mire: Keeping up with new and changing Canadian Drinking Water Guidelines

Juliette O'Keeffe

Over the past year there have been nine new consultations and announcement of eleven new or updated Canadian Drinking Water Guidelines.

EDITOR PICKS – TOP 19 FOR 2019

EVIDENCE REVIEWS

Indigenous food safety and security: community adaptations in the wake of climate pressures

Leela Steiner, Casey Neathway (right)

This review presents evidence on six unique food safety issues, based on adaptation measures taken or planned to be taken to help ensure food security…

Cyanobacteria and drinking water: Occurrence, risks, management and knowledge gaps for public health

Juliette O'Keeffe

This review outlines key factors affecting the proliferation of cyanoblooms…more

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FIELD INQUIRY

What are buzz buttons and what are the known risks associated with exposure to them?

Shirra Freeman

Buzz buttons were seen on the menu for a special event at which food was served. An environmental health officer inquired.

FORUMS

Healthy built environment online discussion forum

NCCEH – Tina Chen

To support cross-sector and pan-Canadian collaboration and discussions, the NCCEH has partnered with the BC Centre for Disease Control to develop an online, participant-driven "Healthy Built Environment in Canada" online discussion forum.

Cyanobacteria and Drinking Water: Knowledge Exchange group for Env. and Public Health in Canada

NCCEH – Juliette O'Keeffe

This group provides a forum for those working in public health and those involved in the management of drinking water to share information, discuss...

GUIDANCE DOCUMENTS

Testing for lead in school drinking water: a summary of sampling protocols

Prabjit Barn, Anne-Marie Nicol, Lydia Ma

This document is intended for public health practitioners and policy makers who are interested in understanding and potentially developing sampling protocols for lead in…

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EDITOR PICKS – TOP 19 FOR 2019

GUIDANCE DOCUMENTS, continued

Human health risk assessments addressing artificial turf and crumb rubber

Angela Eykelbosh

Public concern regarding the potential toxicological effects of exposure to artificial turf pitches has led to the publication of numerous …

Health Impact Assessment (HIA) knowledge and needs scan: findings, gaps and recommendations

Shirra Freeman

Health Impact Assessment (HIA) is a structured approach that allows decision makers…

JOURNAL ARTICLES

Fit to the task: using Canadian data for evidence-informed public health

Angela Eykelbosh

Evidence-informed decision-making (EIDM) is the practice of integrating scientific research evidence with the many…

Sampling for lead in school drinking water: a review of protocols

Juliette O'Keeffe

The National Collaborating Centre for Environmental Health (NCCEH) and the BC Centre for Disease Control (BCCDC) undertook a review of several protocols…

How we talk about "Pot" matters: strategies for improved cannabis risk communication

Leela Steiner, Anne-Marie Nicol, Angela Eykelbosh

This commentary will focus on the conversations public health should be…

VIDEOS

Radon : Public health and cancer prevention

Growing cannabis safely at home

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ENVIRONMENTAL HEALTH RESEARCH SCAN

SELECTED STAFF PUBLICATIONS (NCCEH or BCCDC)

See Editor's Picks above

1. National Collaborating Center for Environmental Health. **October research scan [blog]**. Vancouver, BC: National Collaborating Center for Environmental Health; 2019 10 Oct 10. Available from: http://www.ncceh.ca/content/blog/october-research-scan.

INDIGENOUS ENVIRONMENTAL HEALTH

1. Bowers R, Turner G, Graham ID, Furgal C, Dubois L. **Piecing together the Inuit food security policy puzzle in Nunatsiavut, Labrador (Canada): protocol for a scoping review**. BMJ Open. 2019;9(11):e032601. Available from: https://bmjopen.bmj.com/content/9/11/e032601.
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3. Lucier KJ. One Indigenous Community's Journey Towards Water Security: A Transdisciplinary Reflection on Drinking Water Advisories and Pathways Forward. Hamilton, ON: McMaster University; 2019. Available from: https://macsphere.mcmaster.ca/handle/11375/24913.
4. Rennie D, Karunanayake C, Lawson J, Kirychuk S, Dosman J, Abonyi S, et al. **Damp housing is a risk factor for atopic asthma in a First Nations population of adults**. Eur Respir J. 2019;54(suppl 63):PA2772. Available from: https://www.atsjournals.org/doi/abs/10.1164/ajrccm-conference.2015.191.1_MeetingAbstracts.A2172.

AGRICULTURAL OPERATIONS

BIOLOGICAL AGENTS

BUILT ENVIRONMENT

1. Bhattacharya T, Mills K, Mulally T. **Active Transportation Transforms America. The case for increased public investment in walking and biking connectivity**. Washington, DC: Rails-to-Trails; 2019 Oct. Available from: https://www.railstotrails.org/media/869945/activetransport_2019-report_final_reduced.pdf.
2. Bresler AY, Hanba C, Svider P, Carron MA, Hsueh WD, Paskhover B. **Craniofacial injuries related to motorized scooter use: A rising epidemic**. Am J Otolaryngol. 2019;40(5):662-6. Available from: http://www.sciencedirect.com/science/article/pii/S0196070919304211.
3. International Science Council. **Review of the Urban Health And Wellbeing Programme**. Paris, France: ISC; 2019. Available from: https://council.science/wp-content/uploads/2019/12/UHWB_Review_Report_screen.pdf.

4. Klicnik I, Dogra S. **Perspectives on Active Transportation in a Mid-Sized Age-Friendly City: "You Stay Home"**. Int J Environ Res Public Health. 2019;16(24):4916. Available from: https://www.mdpi.com/1660-4601/16/24/4916.
5. Labib SM, Lindley S, Huck JJ. **Spatial dimensions of the influence of urban green-blue spaces on human health: A systematic review**. Environ Res. 2020;180:N.PAG-N.PAG. Available from: https://www.sciencedirect.com/science/article/pii/S0013935119306668.
6. Neale C, Besa MC, Dickin S, Hongsathavij V, Kuldna P, Muhoza C, et al. **Comparing health, stress, wellbeing and greenspace across six cities in three continents**. Cities & Health. 2019:1-13. Available from: https://doi.org/10.1080/23748834.2019.1696648.
7. Pedersen Zari M. **Understanding and designing nature experiences in cities: a framework for biophilic urbanism**. Cities & Health. 2019:1-12. Available from: https://doi.org/10.1080/23748834.2019.1695511.
8. Pérez E, Braën C, Boyer G, Mercille G, Rehany É, Deslauriers V, et al. **Neighbourhood community life and health: A systematic review of reviews**. Health Place. 2019:102238. Available from: http://www.sciencedirect.com/science/article/pii/S1353829219303430.
9. Swinson T, Wenborn J, Sugarhood P. **Green walking groups: A mixed-methods review of the mental health outcomes for adults with mental health problems**. British Journal of Occupational Therapy. 2019:0308022619888880. Available from: https://journals.sagepub.com/doi/abs/10.1177/0308022619888880.
10. Thielman J, Copes R, Rosella LC, Chiu M, Manson H. Is neighbourhood walkability related to body mass index among different age groups? A cross-sectional study of Canadian urban areas. BMJ Open. 2019;9(11):e032475. Available from: https://bmjopen.bmj.com/content/9/11/e032475.long.

CHEMICAL AGENTS – METALS, GENERAL

General

1. Hildebrand J, Thakar S, Watts T-L, Banfield L, Thabane L, Macri J, et al. **The impact of environmental cadmium exposure on type 2 diabetes risk: a protocol for an overview of systematic reviews**. Systematic Reviews. 2019;8(1):N.PAG-N.PAG. Available from: https://systematicreviewsjournal.biomedcentral.com/articles/10.1186/s13643-019-1246-7.
2. Kuhn EJ, Walker GS, Whiley H, Wright J, Ross KE. **Household Contamination with Methamphetamine: Knowledge and Uncertainties**. Int J Environ Res Public Health. 2019;16(23):4676. Available from: https://www.mdpi.com/1660-4601/16/23/4676.
3. Malin AJ, Bose S, Busgang SA, Gennings C, Thorpy M, Wright RO, et al. **Fluoride exposure and sleep patterns among older adolescents in the United States: a cross-sectional study of NHANES 2015–2016**. Environ Health. 2019;18(1):106. Available from: https://doi.org/10.1186/s12940-019-0546-7.
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CHEMICAL AGENTS – PESTICIDES

CHEMICAL AGENTS – SHALE GAS

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CHILDREN'S ENVIRONMENTAL HEALTH

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2. Ashley-Martin J, Dodds L, Arbuckle TE, Lanphear B, Muckle G, Bouchard MF, et al. **Blood metal levels and early childhood anthropometric measures in a cohort of Canadian children**. Environ Res. 2019;179:108736. Available from: http://www.sciencedirect.com/science/article/pii/S001393511930533X.
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7. McDonald NC, Palmer WM, Steiner RL. **Chapter Ten - Making the economic case for active school travel**. In: Waygood EOD, Friman M, Olsson LE, Mitra R, editors. Transportation and Children's

Well-Being: Elsevier; 2020. p. 187-97. Available from: http://www.sciencedirect.com/science/article/pii/B9780128146941000130.

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12. Rothman L, Fridman L, Cloutier M-S, Manaugh K, Howard A. **Chapter Six - Impact of road traffic and speed on children: Injuries, social inequities, and active transport**. In: Waygood EOD, Friman M, Olsson LE, Mitra R, editors. Transportation and Children's Well-Being: Elsevier; 2020. p. 103-17. Available from: http://www.sciencedirect.com/science/article/pii/B9780128146941000063.
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CLIMATE CHANGE

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2. Bonamonte D, Filoni A, Vestita M, Romita P, Foti C, Angelini G. **The Role of the Environmental Risk Factors in the Pathogenesis and Clinical Outcome of Atopic Dermatitis**. Biomed Res Int. 2019;2019:2450605. Available from: http://www.ncbi.nlm.nih.gov/pubmed/31119157.
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COMMUNICABLE AND INFECTIOUS DISEASES

DRINKING WATER

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EMERGENCY PREPAREDNESS

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Reviews. 2019;8(1):N.PAG-N.PAG. Available from: https://systematicreviewsjournal.biomedcentral.com/articles/10.1186/s13643-019-1211-5.

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ENVIRONMENTAL HEALTH SURVEILLANCE

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ENVIRONMENTAL PLANNING

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FOOD

Safety

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Security

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GENERAL

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HEALTH EQUITY

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HEALTH IMPACT ASSESSMENT

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INDOOR AIR

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