

ENVIRONMENTAL HEALTH RESEARCH SCAN

VOL 3 (1) JANUARY 2019



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](#)
- [FOOD](#)
- [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](#)
- [ZOOSES](#)

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.

EDITOR PICKS

Plastic food contact articles—food chemical safety unwrapped

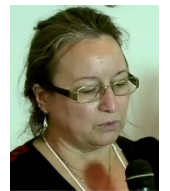
Shirra Freeman (pictured on right), Environmental Health Review, 2018

“This paper provides an overview of plastic food contact articles and their uses, assesses concerns and knowledge gaps, reviews regulation, and discusses challenges for environmental health public practice.”



Outbreak of *S. Weltevreden* linked to fermented cashew nut cheese in Victoria, BC. Lorraine McIntyre (pictured on right), 2018

“Twenty-three Salmonella [] illnesses occurred in a Victoria, British Columbia, Canada, restaurant following consumption of fermented vegan cheese [..] An inspection of the restaurant and review of the food processes revealed high-risk practices.[..] Procedures to safely ferment vegan cheese spreads are presented. [Authors] also discuss higher-risk food items and practises noted in this event that inspectors should be aware of during inspections.”



2017-2018 Bacterial Pathogens in Edible Insects

Canadian Food Inspection Agency, Oct 2018

“...in samples analysed... it appears that the edible insects have been produced under sanitary conditions.”



Backgrounder: Consultation on the strict regulation of additional cannabis products, Health Canada, Dec 2018

“Health Canada is launching a 60-day public consultation on draft regulations addressing additional cannabis products, namely edible cannabis, cannabis extracts and cannabis topicals.”



Safe Food for Canadians Regulations (SOR/2018-108).

Government of Canada, 2018

New food regulations came into effect in January 2019 in Canada.



HealthLink BC. Mercury in Fish.

Government of British Columbia, Dec 2018

This is an updated guide in the Nutrition Series.



EDITOR PICKS

Public health should promote co-operative housing and cohousing
Amy Lubik (pictured on right) and Tom Kosatsky, Can J Public Health, 2019

“In this commentary, we suggest that improving access to co-operative and communal housing is an important area for public health involvement.”



3Ts for reducing lead in drinking water in schools and child care facilities: A training, testing, and taking action approach. Revised manual, US Environmental Protection Agency, 2018

“This manual contains recommendations on how to address lead drinking water in schools and child care facilities...”



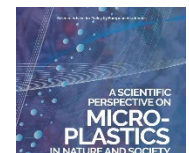
Legal limits on single-use plastics and microplastics: A global review of national laws and regulations.
United Nations Environment Programme, 2018

“This report provides a global overview on the progress of countries in passing laws and regulations that limit the manufacture, import, sale, use and disposal of selected single-use plastics and microplastics...”



A scientific perspective on microplastics in nature and society.
Science Advice for Policy by European Academies, 2019

“In this report, we were asked to review the current evidence on health, environmental and societal impacts of nano- and microplastic pollution.”



Toward understanding the interplay of environmental stressors, infectious disease, and human health.

National Academies of Science, Engineering and Medicine, 2019

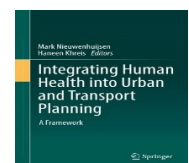
“This workshop will bring together experts to explore the growing body of research on the links between environmental stressors, infectious disease, and human health.”



Integrating human health into urban and transport planning: A framework.

Nieuwenhuijsen M, Khreis H, editors, 2019

“This resource, designed in the form of a table, shows the reader how public health functions are organized within each of these jurisdictions.”



ENVIRONMENTAL HEALTH RESEARCH SCAN

SELECTED STAFF PUBLICATIONS (NCCEH or BCCDC)

1. National Collaborating Center for Environmental Health. **Healthy Built Environment - Resource Library**. Vancouver, BC: NCCEH; 2018. Available from: <http://www.ncceh.ca/forum/general-forums/resource-library>.
2. Schmitt N, Yu G, Greve R, McIntyre L. **Outbreak of S. Weltevreden linked to fermented cashew nut cheese in Victoria, BC**. Environ Health Rev. 2018;61(3):74-81. Available from: <https://doi.org/10.5864/d2018-017>.
3. Freeman S. **Plastic food contact articles—food chemical safety unwrapped**. Environ Health Rev. 2018;61(4):92-7. Available from: <http://pubs.ciphi.ca/doi/abs/10.5864/d2018-028>.
4. Lubik A, Kosatsky T. **Public health should promote co-operative housing and cohousing**. Canadian Journal Of Public Health = Revue Canadienne De Sante Publique. 2019. Available from: <https://link.springer.com/article/10.17269%2Fs41997-018-0163-1>.

NCCEH e-News (French and English)

1. Centre de collaboration nationale en santé environnementale. **e-Nouvelles du CCNSE**. Vancouver, BC: CCNSE; 2019 janvier. Available soon from: <http://www.ccse.ca/content/archive-des-bulletins>.
2. National Collaborating Center for Environmental Health. **NCCEH eNews**. Vancouver, BC: NCCEH; 2019 Jan. Available soon from: <http://www.ncceh.ca/content/newsletter-archive>.

INDIGENOUS ENVIRONMENTAL HEALTH

1. Calder RSD, Bromage S, Sunderland EM. **Risk tradeoffs associated with traditional food advisories for Labrador Inuit**. Environ Res. 2019;168:496-506. Available from: <http://www.sciencedirect.com/science/article/pii/S0013935118304912>.
2. McAuley C, Ng C, McFarland C, Dersch A, Koppe B, Sowan D. **Lead exposure through consumption of small game harvested using lead-based ammunition and the corresponding health risks to first nations in Alberta, Canada**. Cogent Environmental Science. 2018;0(0). Available from: <http://doi.org/10.1080/23311843.2018.1557316>.
3. Pepin C, Muckle G, Moisan C, Forget-Dubois N, Riva M. **Household overcrowding and psychological distress among Nunavik Inuit adolescents: a longitudinal study**. Int J Circumpolar Health. 2018;77(1):1541395. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/30384821>.

AGRICULTURAL OPERATIONS

BIOLOGICAL AGENTS

BUILT ENVIRONMENT

1. Assunção-Denis M-È, Tomalty R. **Increasing cycling for transportation in Canadian communities: Understanding what works**. Transportation Research Part A: Policy and Practice. 2019. Available from: <http://www.sciencedirect.com/science/article/pii/S0965856417314684>.

2. Dadvand P, Nieuwenhuijsen M. **Green space and health**. In: Nieuwenhuijsen M, Khreis H, editors. Integrating Human Health into Urban and Transport Planning: A Framework. Cham: Springer International Publishing; 2019. p. 409-23. Available from: https://doi.org/10.1007/978-3-319-74983-9_20.
3. Giles-Corti B, Gunn L, Hooper P, Boulangé C, Diomedes BZ, Pettit C, et al. **Built Environment and Physical Activity**. In: Nieuwenhuijsen M, Khreis H, editors. Integrating Human Health into Urban and Transport Planning: A Framework. Cham: Springer International Publishing; 2019. p. 347-81. Available from: https://doi.org/10.1007/978-3-319-74983-9_18.
4. Hosford K, Lear SA, Fuller D, Teschke K, Therrien S, Winters M. **Who is in the near market for bicycle sharing? Identifying current, potential, and unlikely users of a public bicycle share program in Vancouver, Canada**. BMC Public Health. 2018;18(1):1326. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/30497439>.
5. Lennard SHC. **Livable cities: Concepts and role in improving health**. In: Nieuwenhuijsen M, Khreis H, editors. Integrating Human Health into Urban and Transport Planning: A Framework. Cham: Springer International Publishing; 2019. p. 51-71. Available from: https://doi.org/10.1007/978-3-319-74983-9_4.
6. Nesbitt L, Meitner MJ, Girling C, Sheppard SRJ, Lu Y. **Who has access to urban vegetation? A spatial analysis of distributional green equity in 10 US cities**. Landscape Urb Plan. 2019;181:51-79. Available from: <https://doi.org/10.1016/j.landurbplan.2018.08.007>.
7. Sansom G. **Sustainable cities, policies and healthy cities**. In: Nieuwenhuijsen M, Khreis H, editors. Integrating Human Health into Urban and Transport Planning: A Framework. Cham: Springer International Publishing; 2019. p. 609-24. Available from: https://doi.org/10.1007/978-3-319-74983-9_29.
8. Tannis C, Senerat A, Garg M, Peters D, Rajupet S, Garland E. **Improving Physical Activity among Residents of Affordable Housing: Is Active Design Enough?** 2019;16(1):151. Available from: <http://www.mdpi.com/1660-4601/16/1/151>.
9. Ward Thompson C, Silveirinha de Oliveira E, Tilley S, Elizalde A, Botha W, Briggs A, et al. **Public Health Research**. Health impacts of environmental and social interventions designed to increase deprived communities' access to urban woodlands: a mixed-methods study. Southampton (UK): NIHR Journals Library; 2019. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK535742/>.

CHEMICAL AGENTS – METALS, GENERAL

General

1. Matthews NH, Fitch K, Wen-Qing L, Morris JS, Christiani DC, Qureshi AA, et al. **Exposure to Trace Elements and Risk of Skin Cancer: A Systematic Review of Epidemiologic Studies**. Cancer Epidemiol Biomarkers Prev. 2019;28(1):3-21. Available from: <http://cebp.aacrjournals.org/content/early/2018/12/07/1055-9965.EPI-18-0286>.
2. Pronk MEJ, Woutersen M, Herremans JMM. **Synthetic turf pitches with rubber granulate infill: are there health risks for people playing sports on such pitches?** J Expo Sci Environ Epidemiol. 2018. Available from: <https://doi.org/10.1038/s41370-018-0106-1>.
3. Thomas VG. **Rationale for the regulated transition to non-lead products in Canada: A policy discussion paper**. Sci Total Environ. 2019;649:839-45. Available from: <https://doi.org/10.1016/j.scitotenv.2018.08.363>.
4. Vinceti M, Filippini T, Wise LA. **Environmental Selenium and Human Health: an Update**. Curr Environ Health Rep. 2018. Available from: <https://doi.org/10.1007/s40572-018-0213-0>.
5. Vinceti M, Vicentini M, Wise LA, Sacchetti C, Malagoli C, Ballotari P, et al. **Cancer incidence following long-term consumption of drinking water with high inorganic selenium content**. Sci Total Environ. 2018;635:390-6. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/29674262>.
PFOA, PFOS, PFAS

1. Bienkowski B. **“Environmentally friendly” flame retardants break down into potentially toxic chemicals.** Environmental Health News. 2019. Available from: <https://www.ehn.org/environmentally-friendly-flame-retardants-break-down-into-potentially-toxic-chemicals-2625440344.html>.
2. Cordner A, De La Rosa VY, Schaidler LA, Rudel RA, Richter L, Brown P. **Guideline levels for PFOA and PFOS in drinking water: the role of scientific uncertainty, risk assessment decisions, and social factors.** J Expo Sci Environ Epidemiol. 2019. Available from: <https://www.nature.com/articles/s41370-018-0099-9>.
3. Trier X, Taxvig C, Rosenma AK, Pedersen GA. **PFAS in paper and board for food contact options for risk management of poly- and perfluorinated substances.** Copenhagen, Denmark: Nordic Council of Ministers; 2018. Available from: [http://orbit.dtu.dk/files/149769110/Rapport PFAS in paper and board for food contact Options for risk management of poly and perfluorina.pdf](http://orbit.dtu.dk/files/149769110/Rapport%20PFAS%20in%20paper%20and%20board%20for%20food%20contact%20Options%20for%20risk%20management%20of%20poly%20and%20perfluorina.pdf).

CHEMICAL AGENTS - PESTICIDES

1. Benbrook CMJESE. **How did the US EPA and IARC reach diametrically opposed conclusions on the genotoxicity of glyphosate-based herbicides?** 2019;31(1):2. Available from: <https://doi.org/10.1186/s12302-018-0184-7>.
2. Caballero M, Amiri S, Denney J, Monsivais P, Hystad P, Amram O. **Estimated Residential Exposure to Agricultural Chemicals and Premature Mortality by Parkinson’s Disease in Washington State.** Int J Environ Res Public Health. 2018;15(12):2885. Available from: <http://www.mdpi.com/1660-4601/15/12/2885>.
3. Craddock HA, Huang D, Turner PC, Quiros-Alcala L, Payne-Sturges DC. **Trends in neonicotinoid pesticide residues in food and water in the United States, 1999-2015.** Environ Health. 2019;18(1):7. Available from: <https://doi.org/10.1186/s12940-018-0441-7>.
4. Gillezeau C, van Gerwen M, Shaffer RM, Rana I, Zhang L, Sheppard L, et al. **The evidence of human exposure to glyphosate: a review.** 2019;18(1):2. Available from: <https://doi.org/10.1186/s12940-018-0435-5>.
5. Mudasir Y, Arun K, Zahid N, Zubair AM. **Health effects of pesticides on pregnant women and children.** In: Khursheed Ahmad W, Mamta, editors. Handbook of Research on the Adverse Effects of Pesticide Pollution in Aquatic Ecosystems. Hershey, PA, USA: IGI Global; 2019. p. 105-22. Available from: <http://services.igi-global.com/resolvedoi/resolve.aspx?doi=10.4018/978-1-5225-6111-8.ch006>.

CHEMICAL AGENTS – SHALE GAS

CHILDREN’S ENVIRONMENTAL HEALTH

1. Feder KA, Letourneau EJ, Brook J. **Children in the Opioid Epidemic: Addressing the Next Generation’s Public Health Crisis.** 2019;143(1):e20181656. Available from: <http://pediatrics.aappublications.org/content/pediatrics/143/1/e20181656.full.pdf>.
2. Holm SM, Leonard V, Durrani T, Miller MD. **Do we know how best to disinfect child care sites in the United States? A review of available disinfectant efficacy data and health risks of the major disinfectant classes.** Am J Infect Control. 2019;47(1):82-91. Available from: <https://doi.org/10.1016/j.ajic.2018.06.013>.
3. Reuben A, Schaefer JD, Moffitt TE, Broadbent J, Harrington H, Houts RM, et al. **Association of childhood lead exposure with adult personality traits and lifelong mental health.** JAMA. 2019. Available from: <https://jamanetwork.com/journals/jamapsychiatry/article-abstract/2720691>.

CLIMATE CHANGE

1. Allen TR, Crawford T, Montz B, Whitehead J, Lovelace S, Hanks AD, et al. **Linking water infrastructure, public health, and sea level rise: Integrated assessment of flood resilience in coastal cities.** Public Works Management & Policy. 2019;24(1):110-39. Available from: <https://journals.sagepub.com/doi/abs/10.1177/1087724X18798380>.
2. Berry P, Enright P, Shumake-Guillemot J, Villalobos Prats E, Campbell-Lendrum D. **Assessing Health Vulnerabilities and Adaptation to Climate Change: A Review of International Progress.** Int J Environ Res Public Health. 2018;15(12):2626. Available from: <http://www.mdpi.com/1660-4601/15/12/2626>.
3. Cheng YT, Lung SC, Hwang JS. **New approach to identifying proper thresholds for a heat warning system using health risk increments.** Environ Res. 2018;170:282-92. Available from: <https://doi.org/10.1016/j.envres.2018.12.059>.
4. King N, Bishop-Williams KE, Beauchamp S, Ford JD, Berrang-Ford L, Cunsolo A, et al. **How do Canadian media report climate change impacts on health? A newspaper review.** 2019. Available from: <https://doi.org/10.1007/s10584-018-2311-2>.
5. Sawatzky A, Cunsolo A, Jones-Bitton A, Middleton J, Harper S. **Responding to Climate and Environmental Change Impacts on Human Health via Integrated Surveillance in the Circumpolar North: A Systematic Realist Review.** Int J Environ Res Public Health. 2018;15(12):2706. Available from: <http://www.mdpi.com/1660-4601/15/12/2706>.
6. Shezi B, Mathee A, Siziba W, Street RA, Naicker N, Kunene Z, et al. **Environmental health practitioners potentially play a key role in helping communities adapt to climate change.** BMC Public Health. 2019;19(1):54. Available from: <https://doi.org/10.1186/s12889-018-6378-5>.
7. Waits A, Emelyanova A, Oksanen A, Abass K, Rautio A. **Human infectious diseases and the changing climate in the Arctic.** Environ Int. 2018;121:703-13. Available from: <https://doi.org/10.1016/j.envint.2018.09.042>.
8. World Health Organization. **COP24 Special report: Health & Climate Change.** Geneva: World Health Organization; 2018. Available from: <https://www.who.int/globalchange/publications/COP24-report-health-climate-change/en/>.

COMMUNICABLE AND INFECTIOUS DISEASES

1. National Academies of Sciences Engineering and Medicine. **Toward understanding the interplay of environmental stressors, infectious disease, and human health.** Washington, DC: NASEM; 2019 Jan. Available from: <http://nas-sites.org/emergingscience/files/2019/01/Full-Meeting-Book.pdf>.

DRINKING WATER

1. Girolamini L, Lizzadro J, Mazzotta M, Iervolino M, Dormi A, Cristino S. **Different Trends in Microbial Contamination between Two Types of Microfiltered Water Dispensers: From Risk Analysis to Consumer Health Preservation.** 2019;16(2):272. Available from: <http://www.mdpi.com/1660-4601/16/2/272>.
2. Rural Policy Learning Commons. **Drinking water contamination and cancer in Canada and USA. Policy brief.** Brandon, MB: Brandon University, Rural Policy Institute; 2019 Jan. Available from: http://rplc-capr.ca/wp-content/uploads/2019/01/RPLC-Drinking-Water-Policy-Brief_Xie-Lusi.pdf.

EMERGENCY PREPAREDNESS

1. Brown MRG, Agyapong V, Greenshaw AJ, Cribben I, Brett-MacLean P, Drolet J, et al. **After the Fort McMurray wildfire there are significant increases in mental health symptoms in grade 7-12 students compared to controls.** BMC Psychiatry. 2019;19(1):18. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/30630501>.
2. Clark DG, Ford JD, Tabish T. **What role can unmanned aerial vehicles play in emergency response in the Arctic: A case study from Canada.** PLoS ONE. 2018;13(12):e0205299. Available from: <https://doi.org/10.1371/journal.pone.0205299>.
3. McGee TK, Nation MO, Christianson AC. **Residents' wildfire evacuation actions in Mishkeegogamang Ojibway Nation, Ontario, Canada.** International Journal of Disaster Risk Reduction. 2019;33:266-74. Available from: <http://www.sciencedirect.com/science/article/pii/S2212420918308847>.
4. Olson DM, Brémault-Phillips S, King S, Metz GAS, Montesanti S, Olson JK, et al. **Recent Canadian efforts to develop population-level pregnancy intervention studies to mitigate effects of natural disasters and other tragedies.** Journal Of Developmental Origins Of Health And Disease. 2019:1-7. Available from: <https://doi.org/10.1017/S2040174418001113>.
5. Seltnerich N. **Future Wildfires and Flooding: Estimates of Increased Likelihood across the United States.** Environ Health Perspect. 126(12):124001. Available from: <https://doi.org/10.1289/EHP3935>.

ENVIRONMENTAL HEALTH SURVEILLANCE

1. Afshari R. **BC Toxicology News Monthly Bulletin (BCTOX).** Vancouver, BC 2018 [updated Nov; cited 11]; 382 - 404]. Available from: <https://blogs.ubc.ca/bctox2015/>.
2. Washington State Department of Health. **Washington Environmental Health Disparities Map.** Kent, WA: Washington State Department of Health; Available from: <https://www.doh.wa.gov/DataandStatisticalReports/EnvironmentalHealth/WashingtonTrackingNetworkWTN/InformationbyLocation/WashingtonEnvironmentalHealthDisparitiesMap>.

ENVIRONMENTAL PLANNING

1. Basagaña X. **Heat Islands/Temperature in Cities: Urban and Transport Planning Determinants and Health in Cities.** In: Nieuwenhuijsen M, Khreis H, editors. Integrating Human Health into Urban and Transport Planning: A Framework. Cham: Springer International Publishing; 2019. p. 483-97. Available from: https://doi.org/10.1007/978-3-319-74983-9_23.
2. Grant M. **Planning for Healthy Cities.** In: Nieuwenhuijsen M, Khreis H, editors. Integrating Human Health into Urban and Transport Planning: A Framework. Cham: Springer International Publishing; 2019. p. 221-50. Available from: https://doi.org/10.1007/978-3-319-74983-9_12.
3. Kaur H, Garg P. **Urban sustainability assessment tools: A review.** Journal of Cleaner Production. 2019;210:146-58. Available from: <https://doi.org/10.1016/j.jclepro.2018.11.009>.
4. Nieuwenhuijsen M, Khreis H, editors. **Integrating human health into urban and transport planning: A framework.** Cham: Springer International Publishing; 2019. Available from: <https://link.springer.com/book/10.1007/978-3-319-74983-9>.
5. Nieuwenhuijsen M, Khreis H. **Integrating Human Health into the Urban Development and Transport Planning Agenda: A Summary and Final Conclusions.** In: Nieuwenhuijsen M, Khreis H, editors. Integrating Human Health into Urban and Transport Planning: A Framework. Cham: Springer International Publishing; 2019. p. 707-18. Available from: https://doi.org/10.1007/978-3-319-74983-9_34.
6. Riley R, de Nazelle A. **Barriers and Enablers of Integrating Health Evidence into Transport and Urban Planning and Decision Making.** In: Nieuwenhuijsen M, Khreis H, editors. Integrating Human Health into

- Urban and Transport Planning: A Framework. Cham: Springer International Publishing; 2019. p. 641-54. Available from: https://doi.org/10.1007/978-3-319-74983-9_31.
7. Schepers P, Lovegrove G, Helbich M. **Urban Form and Road Safety: Public and Active Transport Enable High Levels of Road Safety**. In: Nieuwenhuijsen M, Khreis H, editors. Integrating Human Health into Urban and Transport Planning: A Framework. Cham: Springer International Publishing; 2019. p. 383-408. Available from: https://doi.org/10.1007/978-3-319-74983-9_19.
 8. Sharifi A. **Resilient urban forms: A review of literature on streets and street networks**. Build Environ. 2019;147:171-87. Available from: <https://doi.org/10.1016/j.buildenv.2018.09.040>.

FOOD

Safety

1. Canadian Food Inspection Agency. **2017-2018 Bacterial Pathogens in Edible Insects**. Ottawa, ON: CFIA; 2018 Oct. Available from: <http://www.inspection.gc.ca/food/chemical-residues-microbiology/food-safety-testing-bulletins/2018-10-03/bacterial-pathogens-in-edible-insects/eng/1536600379922/1536600380203>.
2. Government of Canada. **Safe Food for Canadians Regulations (SOR/2018-108)**. Ottawa, ON: Government of Canada; 2018. Available from: <https://laws-lois.justice.gc.ca/eng/regulations/SOR-2018-108/index.html>.
3. Health Canada. **Food, nutrients and health: Interim evidence update 2018**. Ottawa, ON: Health Canada; 2019 Jan. Available from: <https://www.canada.ca/en/health-canada/services/canada-food-guide/resources/evidence/food-nutrients-health-interim-evidence-update-2018.html>.
4. HealthLink BC. **Mercury in fish**. Victoria, BC: Government of British Columbia; 2018 Dec. Available from: <https://www.healthlinkbc.ca/hlbc/files/documents/healthfiles/hfile68m.pdf>.
5. Mason JB, Black R, Booth SL, Brentano A, Broadbent B, Connolly P, et al. **Fostering strategies to expand the consumption of edible insects: The value of a tripartite coalition between academia, industry, and government**. Current developments in nutrition. 2018;2(8):056. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/30140788>.
6. Schmitt N, Yu G, Greve R, McIntyre L. **Outbreak of S. Weltevreden linked to fermented cashew nut cheese in Victoria, BC**. Environ Health Rev. 2018;61(3):74-81. Available from: <https://doi.org/10.5864/d2018-017>.
7. Voelker R. **Can insects compete with beef, poultry as nutritional powerhouses?** JAMA. 2019. Available from: <http://dx.doi.org/10.1001/jama.2018.20747>.

Security

1. Carrillo-Álvarez E, Penne T, Boeckx H, Storms B, Goedemé T. **Food Reference Budgets as a Potential Policy Tool to Address Food Insecurity: Lessons Learned from a Pilot Study in 26 European Countries**. 2018;16(1):32. Available from: <http://www.mdpi.com/1660-4601/16/1/32>.
2. McKay M. **Experiences of Food Insecurity Among Older Women in Rural Nova Scotia**. Halifax, NS: Dalhousie University; 2018. Available from: <https://dalspace.library.dal.ca/bitstream/handle/10222/75041/McKay-Madeleine-MA-HPRO-December-2018.pdf?sequence=1&isAllowed=y>.

GENERAL

1. Liu J, Wen H, Zhu D, Kumfer W. **Investigation of the Contributory Factors to the Guessability of Traffic Signs**. 2019;16(1):162. Available from: <http://www.mdpi.com/1660-4601/16/1/162>.

2. Stockings E, Bartlem K, Hall A, Hodder R, Gilligan C, Wiggers J, et al. **Whole-of-community interventions to reduce population-level harms arising from alcohol and other drug use: a systematic review and meta-analysis.** *Addiction*. 2018;113(11):1984-2018. Available from: <https://doi.org/10.1111/add.14277>
3. Yuma P, Fowler J, Duerr F, Kogan L, Stockman J, Graham DJ, et al. **Promoting Outdoor Physical Activity for People and Pets: Opportunities for Veterinarians to Engage in Public Health.** *Topics in Companion Animal Medicine*. 2019;34:18-21. Available from: <http://www.sciencedirect.com/science/article/pii/S1938973618301314>.

Health Policy

1. Loer K, Ewert B. **Understanding the Challenges in Public Health Policymaking: Introduction.** In: Ewert B, Loer K, editors. *Behavioural Policies for Health Promotion and Disease Prevention*. Cham: Springer International Publishing; 2019. p. 1-10. Available from: https://doi.org/10.1007/978-3-319-98316-5_1.
2. Lubik A, Kosatsky T. **Public health should promote co-operative housing and cohousing.** *Canadian Journal of Public Health = Revue Canadienne De Sante Publique*. 2019. Available from: <https://link.springer.com/article/10.17269%2Fs41997-018-0163-1#citeas>.
3. Owen L, Pennington B, Fischer A, Jeong K. **The cost-effectiveness of public health interventions examined by NICE from 2011 to 2016.** *J Public Health (Oxf)*. 2018;40(3):557-66. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/28977629?dopt=Abstract>.
4. Strassheim H, Loer K. **Who Are the Policymakers and What Are Their Interests?** In: Ewert B, Loer K, editors. *Behavioural Policies for Health Promotion and Disease Prevention*. Cham: Springer International Publishing; 2019. p. 73-92. Available from: https://doi.org/10.1007/978-3-319-98316-5_5.

HEALTH EQUITY

1. Allen J, Farber S. **Sizing up transport poverty: A national scale accounting of low-income households suffering from inaccessibility in Canada, and what to do about it.** *Transport Policy*. 2019;74:214-23. Available from: <http://www.sciencedirect.com/science/article/pii/S0967070X18304736>.
2. Barros A, Boutayeb A, Brown C, Dean HD, Di Ruggiero E, Ferrelli RM, et al. **Towards a global monitoring system for implementing the Rio Political Declaration on Social Determinants of Health: developing a core set of indicators for government action on the social determinants of health to improve health equity.** *Int J Equity Health*. 2018;17(1):136. Available from: <https://doi.org/10.1186/s12939-018-0836-7>.
3. Cohen B, Salter K, Kothari A, Janzen Le Ber M, Lemieux S, Moran K, et al. **Indicators to guide health equity work in local public health agencies: a locally driven collaborative project in Ontario.** *Health Promot Chronic Dis Prev Can*. 2018;38(7-8):277-85. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/30129715>.
4. Cole BL, MacLeod KE, Spriggs R. **Health impact assessment of transportation projects and policies: Living up to aims of advancing population health and health equity?** *Annu Rev Publ Health*. 2019. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/30601724>.
5. National Association of County and City Health Officials. **Advancing Public Narrative for Health Equity and Social Justice.** 2019. Available from: http://eweb.naccho.org/eweb/DynamicPage.aspx?WebCode=ProdDetailAdd&ivd_prc_prd_key=68df828b-ce9e-4834-8e3f-a60d478cb559&ivd_qty=1&Action=Add&site=naccho&ObjectKeyFrom=1A83491A-9853-4C87-86A4-F7D95601C2E2&DoNotSave=yes&Pare.
6. Tsouros AD. **Healthy Cities: A Political Movement Which Empowered Local Governments to Put Health and Equity High on Their Agenda.** In: Nieuwenhuijsen M, Khreis H, editors. *Integrating Human Health into Urban and Transport Planning: A Framework*. Cham: Springer International Publishing; 2019. p. 73-88. Available from: https://doi.org/10.1007/978-3-319-74983-9_5.

HEALTH IMPACT ASSESSMENT

1. de Souza RJ, Arora R, Gauvin L, Williams NC, Lear SA, Oliveira AP, et al. **Development of an on-line interactive map to display environmental health assessments of Canadian communities: knowledge-translation to support collaborations for health.** *Cities & Health.* 2018:1-7. Available from: <https://doi.org/10.1080/23748834.2018.1546560>.
2. de Souza RJ, Gauvin L, Williams NC, Lear SA, Oliveira AP, Desai D, et al. **Environmental health assessment of communities across Canada: contextual factors study of the Canadian Alliance for Healthy Hearts and Minds.** *Cities & Health.* 2018:1-18. Available from: <https://doi.org/10.1080/23748834.2018.1548071>.
3. Nieuwenhuijsen M, Khreis H, Verlinghieri E, Mueller N, Rojas-Rueda D. **The role of health impact assessment for shaping policies and making cities healthier.** In: Nieuwenhuijsen M, Khreis H, editors. *Integrating Human Health into Urban and Transport Planning: A Framework.* Cham: Springer International Publishing; 2019. p. 609-24. Available from: https://doi.org/10.1007/978-3-319-74983-9_29.
4. Rojas-Rueda D. **Health impact assessment of active transportation.** In: Nieuwenhuijsen M, Khreis H, editors. *Integrating Human Health into Urban and Transport Planning: A Framework.* Cham: Springer International Publishing; 2019. p. 625-40. Available from: https://doi.org/10.1007/978-3-319-74983-9_30.

INDOOR AIR

NUISANCE CONTROL

OUTDOOR AIR

1. Harford D, Raftis C. **Low carbon resilience: Best practices for professionals.** Burnaby, BC: Simon Fraser University Adaptation to Climate Change Team; 2018 Dec. Available from: http://act-adapt.org/wp-content/uploads/2018/12/lcr_best_practices_web-FINAL-1.pdf.
2. Hoffmann B. **Air Pollution in Cities: Urban and Transport Planning Determinants and Health in Cities.** In: Nieuwenhuijsen M, Khreis H, editors. *Integrating Human Health into Urban and Transport Planning: A Framework.* Cham: Springer International Publishing; 2019. p. 425-41. Available from: https://doi.org/10.1007/978-3-319-74983-9_21.
3. Melody SM, Ford J, Wills K, Venn A, Johnston FH. **Maternal exposure to short-to medium-term outdoor air pollution and obstetric and neonatal outcomes: A systematic review.** *Environ Pollut.* 2019;244:915-25. Available from: <https://doi.org/10.1016/j.envpol.2018.10.086>.
4. Raffetti E, Treccani M, Donato F. **Cement plant emissions and health effects in the general population: a systematic review.** *Chemosphere.* 2019;218:211-22. Available from: <https://doi.org/10.1016/j.chemosphere.2018.11.088>.
5. Tang J, McNabola A, Misstear B, Pilla F, Alam M. **Assessing the Impact of Vehicle Speed Limits and Fleet Composition on Air Quality Near a School.** 2019;16(1):149. Available from: <http://www.mdpi.com/1660-4601/16/1/149>.
6. World Health Organization. **Clean air for health: Geneva Action Agenda. First WHO Global Conference on Air Pollution and Health – summary report.** Geneva: WHO; 2018 Nov. Available from: <https://www.who.int/phe/news/clean-air-for-health/en/>.

PERSONAL SERVICE ESTABLISHMENTS

1. Popalayar A, Stafford J, Ogunremi T, Dunn K. **Infection prevention guidance for personal services settings: Evidence, gaps and the way forward.** Can Commun Dis Rep. 2019;45(1):1-11. Available from: <https://doi.org/10.14745/ccdr.v45i01a01>.

PEST CONTROL

PHYSICAL AGENTS

1. Kc A, Whale J, Urmee T. **Urban wind conditions and small wind turbines in the built environment: A review.** Renewable Energy: An International Journal. 2019;131:268-83. Available from: <https://doi.org/10.1016/j.renene.2018.07.050>.
2. Lercher P. **Noise in cities: urban and transport planning determinants and health in cities.** In: Nieuwenhuijsen M, Khreis H, editors. Integrating Human Health into Urban and Transport Planning: A Framework. Cham: Springer International Publishing; 2019. p. 443-81. Available from: https://doi.org/10.1007/978-3-319-74983-9_22.
3. Lowry J, Hon C-Y. **The public's exposure to and perception of noise in aquatic facilities: a pilot study.** Environ Health Rev. 2018;61(4):98-103. Available from: <http://pubs.ciphi.ca/doi/10.5864/d2018-026>.
4. Qutob SS, O'Brien M, Feder K, McNamee J, Guay M, Than J. **Prevalence of laser beam exposure and associated injuries.** Health Rep. 2019. Available from: <https://www150.statcan.gc.ca/n1/pub/82-003-x/work-sujets-eng.htm>.
5. Taylor J, Klenk NJER, Science S. **The politics of evidence: Conflicting social commitments and environmental priorities in the debate over wind energy and public health.** 2019;47:102-12. Available from: <https://doi.org/10.1016/j.erss.2018.09.001>.

RADIATION

1. Hoel D, de Gruijl F. **Sun Exposure Public Health Directives.** Int J Environ Res Public Health. 2018;15(12):2794. Available from: <http://www.mdpi.com/1660-4601/15/12/2794>.

RECREATIONAL AND SURFACE WATER

1. Mavridou A, Pappa O, Papatzitze O, Dioli C, Kefala AM, Drossos P, et al. **Exotic Tourist Destinations and Transmission of Infections by Swimming Pools and Hot Springs—A Literature Review.** Int J Environ Res Public Health. 2018;15(12):2730. Available from: <http://www.mdpi.com/1660-4601/15/12/2730>.
2. Torbick N, Ziniti B, Stommel E, Linder E, Andrew A, Caller T, et al. **Assessing Cyanobacterial Harmful Algal Blooms as Risk Factors for Amyotrophic Lateral Sclerosis.** 2018;33(1):199-212. Available from: <https://doi.org/10.1007/s12640-017-9740-y>.

RISK ASSESSMENT, COMMUNICATION

SENIORS' ENVIRONMENTAL HEALTH

1. Gardam KJ. **A social ecological exploration of community adult playground use among seniors in Northern Ontario.** Thunder Bay, ON: Lakehead University; 2018. Available from: <http://knowledgecommons.lakeheadu.ca:7070/bitstream/handle/2453/4321/GardamK2018m-1a.pdf?sequence=1&isAllowed=y>.
2. Labra O, Maltais D, Gingras-Lacroix G. **Medium-Term Health of Seniors Following Exposure to a Natural Disaster.** *Inquiry.* 2018;55:46958018766667. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/29701115>.

TOBACCO, CANNABIS, VAPING

1. Bator C. **Emerging issues in cannabis: a look at home production for medicinal use in British Columbia.** *Future Plans.* 2018;1. Available from: <https://viurrspace.ca/bitstream/handle/10613/8607/Bator.pdf?sequence=1&isAllowed=y>.
2. Brady BR, De La Rosa JS, Nair US, Leischow SJJ, Ajohb. **Electronic Cigarette Policy Recommendations: A Scoping Review.** 2019;43(1):88-104.
3. Canadian Public Health Association. **Survey of Health and Social Service Providers – Report.** Ottawa, ON: CPHA; 2018 Aug. Available from: <https://www.cpha.ca/survey-health-and-social-service-providers-report>.
4. Health Canada. **Regulatory Initiative: Regulations Enabling the Legal Sale of Cannabis Edibles and Concentrates - Forward Regulatory Plan 2018-2020.** Ottawa, ON: Health Canada; 2018. Available from: <https://www.canada.ca/en/health-canada/corporate/about-health-canada/legislation-guidelines/acts-regulations/forward-regulatory-plan/2018-2020/cannabis-edibles.html>.
5. Health Canada. **Backgrounder: Consultation on the strict regulation of additional cannabis products.** Ottawa, ON: Health Canada; 2018 Dec. Available from: <https://www.canada.ca/en/health-canada/news/2018/12/backgrounder-consultation-on-the-strict-regulation-of-additional-cannabis-products.html>.
6. Health Canada. **Consultation: Strict regulation of edible cannabis, extracts and topicals.** Ottawa, ON: Health Canada; 2018 Dec. Available from: <https://www.canada.ca/en/health-canada/programs/consultation-strict-regulation-edible-cannabis-extracts-topicals.html>.
7. Intrinsik. **A rapid health impact assessment for a potential gambling facility in the city of Delta, BC.** Delta, BC: Prepared for the British Columbia Lottery Corporation (BCLC); 2018 Sep. Available from: <https://corporate.bclc.com/content/dam/bclc/corporate/documents/corporate-reports/fact-sheet-community-health-impact-assessment-2018.pdf>.
8. Leadbeater BJ, Ames ME, Linden-Carmichael AN. **Age-varying effects of cannabis use frequency and disorder on symptoms of psychosis, depression and anxiety in adolescents and adults.** *Addiction.* 2019;114(2):278-93. Available from: <https://doi.org/10.1111/add.14459>.
9. Mayne SL, Auchincloss AH, Tabb LP, Stehr M, Shikany JM, Schreiner PJ, et al. **Associations of Bar and Restaurant Smoking Bans With Smoking Behavior in the CARDIA Study: A 25-Year Study.** *Am J Epidemiol.* 2018;187(6):1250-8. Available from: <https://doi.org/10.1093/aje/kwx372>.
10. Ryan SA. **A Modern Conundrum for the Pediatrician: The Safety of Breast Milk and the Cannabis-Using Mother.** 2018;142(3):e20181921. Available from: <http://pediatrics.aappublications.org/content/pediatrics/142/3/e20181921.full.pdf>.
11. Steigerwald S, Wong PO, Khorasani A, Keyhani S. **The form and content of cannabis products in the United States.** *J Gen Intern Med.* 2018;33(9):1426-8. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/29770952>.

12. Webster P. **Canada to widen its newly opened retail cannabis market.** The Lancet. 2019;393(10167):116. Available from: [https://doi.org/10.1016/S0140-6736\(19\)30075-3](https://doi.org/10.1016/S0140-6736(19)30075-3).

WASTE

1. Orr B, Karadagli F. **Effects of flushable products on wastewater infrastructure and natural aquatic environments.** Ottawa, ON: Report to Fisheries and Oceans Canada; 2018. Available from: http://cwwa.ca/pdf_files/Effects_of_Wipes_Report_DFO.pdf.

ZOONOSES

1. Sanderson H, Brown RS, Hania P, McAllister TA, Majury A, Liss SN. **Chapter 7 - Antimicrobial resistant genes and organisms as environmental contaminants of emerging concern: addressing global public health risks.** In: Roig B, Weiss K, Thireau V, editors. Management of Emerging Public Health Issues and Risks: Academic Press; 2019. p. 147-87. Available from: <http://www.sciencedirect.com/science/article/pii/B978012813290600007X>.

For more on environmental health information and evidence, visit NCCEH.ca