

ENVIRONMENTAL HEALTH RESEARCH SCAN

VOL 7 (7) JULY 2023



<p>AIR QUALITY</p> <ul style="list-style-type: none"> • Indoor air • Outdoor air • Radon, Other 	<p>CLIMATE CHANGE</p> <ul style="list-style-type: none"> • Extreme weather • Flooding • Sea level rise • Wildfires, Other 	<p>DISEASES, VECTORS, PESTS</p> <ul style="list-style-type: none"> • COVID-19 • Other infectious diseases • Vectors & zoonoses • Pests, Other
<p>FOOD</p> <ul style="list-style-type: none"> • Food safety • Food security • Growing food, Other 	<p>BUILT ENVIRONMENT</p> <ul style="list-style-type: none"> • Green & blue spaces • Housing • Noise • Planning & design • Transportation, Other 	<p>PUBLIC HEALTH FUNDAMENTALS</p> <ul style="list-style-type: none"> • Communication • Health promotion • Health impact assessment • Health equity • One Health, Other
<p>WATER</p> <ul style="list-style-type: none"> • Drinking water • Recreational water • Small water systems • Wastewater, Other 	<p>NON-CLIMATE RELATED DISASTERS</p> <ul style="list-style-type: none"> • Earthquakes • Marine • Terrestrial, Other 	<p>OTHER TOPICS</p> <ul style="list-style-type: none"> • Cannabis products • Tobacco, nicotine products • Ionizing, non-ionizing radiation • Personal services establishments, Other
<p>SPECIFIC POPULATIONS (children, Indigenous Peoples, older adults, other)</p>		

Environmental Health (EH) Research Scan: Aims and Scope

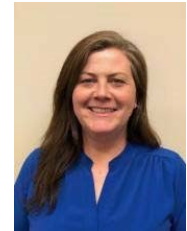
NCCEH's EH Research Scan aims to expand awareness of topics in environmental health, in line with [NCCEH's vision](#) to be the indispensable online resource for environmental health practitioners and policy-makers across Canada. This research scan is not peer reviewed; it does not cover all research, news, and information, and NCCEH is not responsible for the accuracy of the content from media or databases.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.

EDITOR PICKS

Avian influenza A(H5N1) and the continuing outbreak [evidence brief].

Juliette O’Keeffe, Knowledge Translation Scientist, NCCEH

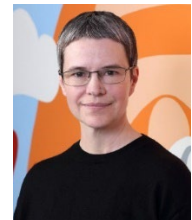
“Environmental public health practice has an important role to play in delivering on a One Health approach by: leading on risk communication to the public and high-risk groups; identifying important environmental drivers of transmission; more...”



Chronic diseases associated with mortality in British Columbia, Canada during the 2021 Western North America extreme heat event.

Sarah Henderson, Scientific Director, Environmental Health Services, BCCDC, and co-authors

“...results confirm the role of mental illness in extreme heat event risk and provide further impetus for interventions that target specific groups of high-risk individuals based on underlying chronic conditions.”



Heat response planning for Southern Interior B.C. communities: a toolkit. Interior Health

“The purpose of the toolkit is to provide community partners with practical information and resources that will assist them in developing and implementing systems and strategies to prepare for and respond to extreme heat, specifically in communities in the Southern Interior of B.C.”



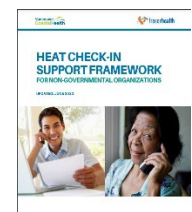
The case for adapting to extreme heat. Costs of the 2021 B.C. heat wave Canadian Climate Institute

“Overall, we find that there was a constellation of factors that led to the impacts and costs of the 2021 heat wave, which were extensive. While the most severe impacts were related to the deaths of hundreds of people, communities and businesses across the province were affected in many ways, highlighting vulnerabilities that should be addressed through adaptation. Our analysis and modelling led to six key findings...”



Heat check-in support framework for non-governmental organizations. Vancouver Coastal Health, Fraser Health

“Heat check-ins happen in a variety of settings and by staff or volunteers with diverse training. Given the wide context, this framework was created so organizations may select information that is most relevant to their setting to develop their own organizational check-in plans.”



June research scan [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

NCCEH eNews (June 2023): Reducing tick-related risks through improved design and maintenance in outdoor environments; more...; more...

National Collaborating Centre for Environmental Health



This monthly eNews highlights recent environmental health publications, research scans, webinars and other events and resources.

ENVIRONMENTAL HEALTH RESEARCH SCAN

SELECTED PUBLICATIONS

1. Diplock K. **The role of environmental public health professionals in collaborative foodborne illness outbreak investigations [webinar]**. Vancouver, BC: National Collaborating Centre for Environmental Health; 2023 06 28 Jun 28. Available from: <https://ncceh.ca/events/upcoming-webinars/role-environmental-public-health-professionals-collaborative-foodborne>.
2. Henderson SB, McLean KE, Ding Y, Yao J, Turna NS, McVea D, et al. **Hot weather and death related to acute cocaine, opioid and amphetamine toxicity in British Columbia, Canada: a time-stratified case-crossover study**. CMAJ Open. 2023;11(3):E569-e78. Available from: <https://doi.org/10.9778%2Fcmajo.20210291>.
3. Lee MJ, McLean KE, Kuo M, Richardson GRA, Henderson SB. **Chronic diseases associated with mortality in British Columbia, Canada during the 2021 Western North America extreme heat event**. Geohealth. 2023;7(3):e2022GH000729. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36938119>.
4. National Collaborating Centre for Environmental Health. **June research scan**. Vancouver, BC: NCCEH; 2023 06 21 Jun 21. Available from: <https://ncceh.ca/sites/default/files/2023-06/NCCEH%20Research%20Scan%20-202306%20with%20COVID-19%20-FOR%20POSTING.pdf>.
5. National Collaborating Centre for Environmental Health. **NCCEH eNews (June 2023): Foodborne illness outbreaks: recommendations for collaborative investigations; more...** Vancouver, BC: NCCEH; 2023 06 22 Jun 22. Available from: https://app.cyberimpact.com/newsletter-view-online?ct=SDWvhiTx-8Rf3wmEtbMTgo60Ljv7i_3zMIyZjiCks-7Q8V26ss4Z43VUvUWNLsszruCa4RFzWxDZjGM69e405Q~~.
6. O’Keeffe J. **Avian influenza A(H5N1) and the continuing outbreak [evidence brief]**. Vancouver, BC: National Collaborating Centre for Environmental Health; 2023 07 11 Jul 11. Available from: <https://ncceh.ca/resources/evidence-briefs/avian-influenza-ah5n1-and-continuing-outbreak>.

1. AIR QUALITY

INDOOR AIR

1. Argyropoulos CD, Skoulou V, Efthimiou G, Michopoulos AK. **Airborne transmission of biological agents within the indoor built environment: a multidisciplinary review.** *Air Qual Atmos Health.* 2023;16(3):477-533. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36467894>.
2. Buonomano A, Forzano C, Giuzio GF, Palombo A. **New ventilation design criteria for energy sustainability and indoor air quality in a post Covid-19 scenario.** *Renew Sustain Energy Rev.* 2023;182:113378. Available from: <https://doi.org/10.1016%2Fj.rser.2023.113378>.
3. Faridi S, Allen RW, Brook RD, Yousefian F, Hassanvand MS, Carlsten C. **An updated systematic review and meta-analysis on portable air cleaners and blood pressure: Recommendations for users and manufacturers.** *Ecotoxicol Environ Saf.* 2023;263:115227. Available from: <https://www.sciencedirect.com/science/article/pii/S0147651323007315>.
4. Greater Wellington Regional Council. **Pilot study: indoor air quality monitoring on Metlink buses.** New Zealand: GWRC; 2023 06 06. Available from: <https://www.gwrc.govt.nz/assets/Documents/2023/06/Pilot-indoor-air-quality-monitoring-Metlink-buses-2022-23.pdf>.
5. Li J, Fan G, Ou Y, Deng Q. **Characteristics and control strategies of indoor particles: An updated review.** *Energy Build.* 2023;294:113232. Available from: <https://www.sciencedirect.com/science/article/pii/S0378778823004620>.
6. Liao J, Ling Z, Zhang Y. **Indoor particle dispersion due to hand dryer in public washroom: an in silico study.** *Sci Rep.* 2023;13(1):11554. Available from: <https://doi.org/10.1038/s41598-023-37804-8>.
7. Quick M, Tjepkema M. **The prevalence of household air conditioning in Canada.** *Health Rep.* 2023(Jul). Available from: <https://www150.statcan.gc.ca/n1/pub/82-003-x/2023007/article/00002-eng.htm>.
8. Saskatchewan Environment Public Health and Safety. **Indoor Air Quality and Ventilation.** Regina, SK: Government of Saskatchewan; 2023 06 01. Available from: <https://www.saskatchewan.ca/residents/environment-public-health-and-safety/environmental-health/indoor-air-quality>.
9. Tabuchi H. **Study compares gas stove pollution to secondhand cigarette smoke.** *The New York Times.* 2023 Jun 17. Available from: <https://www.nytimes.com/2023/06/17/climate/gas-stoves-benzene-cigarettes.html>.
10. Ulziikhuu B, Gombojav E, Banzrai C, Batsukh S, Enkhtuya E, Boldbaatar B, et al. **Who benefits most from a prenatal HEPA filter air cleaner intervention on childhood cognitive development? The UGAAR randomized controlled trial.** *Environ Res.* 2023;231:115991. Available from: <https://www.sciencedirect.com/science/article/pii/S0013935123007831>.

OUTDOOR AIR

1. Anthes E. **The new war on bad air.** *The New York Times.* 2023 Jun 17. Available from: <https://www.nytimes.com/2023/06/17/health/covid-ventilation-air-quality.html?searchResultPosition=1>.

2. Chamberlain RC, Fecht D, Davies B, Lavery AA. **Health effects of low emission and congestion charging zones: a systematic review.** *The Lancet Public Health.* 2023;8(7):e559-e74. Available from: [https://doi.org/10.1016/S2468-2667\(23\)00120-2](https://doi.org/10.1016/S2468-2667(23)00120-2).
3. European Environment Agency. **Air pollution and children's health [briefing].** EEA; 2023 Apr. Available from: <https://www.eea.europa.eu/publications/air-pollution-and-childrens-health/air-pollution-and-childrens-health>.
4. Krzyzanowski M. **The health impacts of nitrogen dioxide (NO₂) pollution.** Brussels, Belgium: Review of the science commissioned by the Health and Environment Alliance (HEAL); 2023. Available from: https://www.env-health.org/wp-content/uploads/2023/06/NO2_briefing_EN.pdf.
5. Rai M, Stafoggia M, de'Donato F, Scortichini M, Zafeiratou S, Vazquez Fernandez L, et al. **Heat-related cardiorespiratory mortality: Effect modification by air pollution across 482 cities from 24 countries.** *Environ Int.* 2023;174:107825. Available from: <https://doi.org/10.1016/j.envint.2023.107825>.
6. Wen J, Baylis P, Boomhower J, Burke M. **Quantifying fire-specific smoke severity.** *Earth ArXiv.* 2023. Available from: <https://eartharxiv.org/repository/view/5060/>.
7. Zhou W, Wang Q, Li R, Kadier A, Wang W, Zhou F, et al. **Combined effects of heatwaves and air pollution, green space and blue space on the incidence of hypertension: A national cohort study.** *Sci Total Environ.* 2023;867:161560. Available from: <https://doi.org/10.1016/j.scitotenv.2023.161560>.

RADON, OTHER

2. FOOD

FOOD SAFETY

1. **Canada reevaluating maximum levels for pesticide residues in food.** *Food Safety Magazine.* 2023. Available from: <https://www.food-safety.com/articles/8688-canada-reevaluating-maximum-levels-for-pesticide-residues-in-food>.
2. Canadian Food Inspection Agency. **The Canadian Food Inspection Agency takes action to address forever chemicals in the environment.** Ottawa, ON: CFIA; 2023 [updated May 19]; Available from: <https://www.canada.ca/en/food-inspection-agency/news/2023/05/the-canadian-food-inspection-agency-takes-action-to-address-forever-chemicals-in-the-environment.html>.
3. European Food Safety Authority. **Glyphosate: no critical areas of concern; data gaps identified.** Parma, Italy: EFSA; 2023 Jul 6. Available from: <https://www.efsa.europa.eu/en/news/glyphosate-no-critical-areas-concern-data-gaps-identified>.
4. European Food Safety Authority. **Glyphosate. What has EFSA done? What are the main conclusions.** Parma, Italy: EFSA; 2023 Jul 6. Available from: https://www.efsa.europa.eu/sites/default/files/2023-07/glyphosate_factsheet.pdf.
5. Merks H, Boone R, Janecko N, Viswanathan M, Dixon BR. **Foodborne protozoan parasites in fresh mussels and oysters purchased at retail in Canada.** *Int J Food Microbiol.* 2023;399:110248. Available from: <https://www.sciencedirect.com/science/article/pii/S0168160523001642>.

6. Shahmohamadloo RS, Bhavsar SP, Ortiz Almirall X, Marklevitz SAC, Rudman SM, Sibley PK. **Cyanotoxins accumulate in Lake St. Clair fish yet their fillets are safe to eat.** *Sci Total Environ.* 2023;874:162381. Available from: <https://doi.org/10.1016/j.scitotenv.2023.162381>.
7. Shahmohamadloo RS, Bhavsar SP, Ortiz Almirall X, Marklevitz SAC, Rudman SM, Sibley PK. **Lake Erie fish safe to eat yet afflicted by algal hepatotoxins.** *Sci Total Environ.* 2023;861:160474. Available from: <https://doi.org/10.1016/j.scitotenv.2022.160474>.
8. Trainer VL, King TL. **SoundToxins: A research and monitoring partnership for harmful phytoplankton in Washington State.** *Toxins.* 2023;15(3). Available from: <https://soundwaterstewards.org/projects/sound-toxins/#:~:text=SoundToxins%20is%20a%20phytoplankton%20monitoring,to%20humans%20and%20to%20sealife>.
9. World Health Organization, Food and Agriculture Organization of the United Nations. **Food safety aspects of cell-based food.** WHO and FAO; 2023. Available from: <https://www.who.int/publications/i/item/9789240070943>.

FOOD SECURITY

1. Aidoo OF, Osei-Owusu J, Asante K, Dofuor AK, Boateng BO, Debrah SK, et al. **Insects as food and medicine: a sustainable solution for global health and environmental challenges.** *Front Nutr.* 2023;10:1113219. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/37388630>.

GROWING FOOD, OTHER

1. Ferrante M, Rapisarda P, Grasso A, Favara C, Oliveri Conti G. **Glyphosate and environmental toxicity with “one health” approach, a review.** *Environ Res.* 2023:116678. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/37459948>.

3. WATER

DRINKING WATER

1. Lehfeld AS, Reber F, Lewandowsky MM, Jahn HJ, Luck C, Petzold M, et al. **Could oral hygiene prevent cases of at-home-acquired Legionnaires’ disease? - Results of a comprehensive case-control study on infection sources, risk, and protective behaviors.** *Front Microbiol.* 2023;14:1199572. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/37396377>.
2. Mac VV, Labgold K, Moline HL, Smith JC, Carroll J, Clemmons N, et al. **Notes from the Field: Legionnaires Disease in a U.S. Traveler After Staying in a Private Vacation Rental House in the U.S. Virgin Islands - United States, February 2022.** *MMWR Morb Mortal Wkly Rep.* 2023;72(20):564-5. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/37200227>.
3. Mentula S, Kaariainen S, Jaakola S, Niittynen M, Airaksinen P, Koivula I, et al. **Tap water as the source of a Legionnaires’ disease outbreak spread to several residential buildings and one hospital, Finland, 2020 to 2021.** *Euro Surveill.* 2023;28(11). Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36927717>.
4. Newfoundland and Labrador Department of Environment and Climate Change. **Drinking Water Safety Action Plan for Newfoundland and Labrador.** St John’s, NL: Government of

Newfoundland and Labrador; 2023. Available from: <https://www.gov.nl.ca/ecc/files/23074-Drinking-Water-Safety-Plan-April-10.pdf>.

RECREATIONAL WATER

1. Donovan CV, MacFarquhar JK, Wilson E, Sredl M, Tanz LJ, Mullendore J, et al. **Legionnaires' Disease Outbreak Associated With a Hot Tub Display at the North Carolina Mountain State Fair, September 2019**. Public Health Rep. 2023;333549231159159. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36971250>.
2. Fischer FB, Saucy A, Vienneau D, Hattendorf J, Fanderl J, de Hoogh K, et al. **Impacts of weather and air pollution on Legionnaires' disease in Switzerland: A national case-crossover study**. Environ Res. 2023;233:116327. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/37354934>.
3. Gaston CJ, Royer HM, Raymond III J, Maizel D, Lanpher KB, Solo-Gabriele H, et al. **Filtration efficiency of air conditioner filters and face masks to limit exposure to aerosolized algal toxins**. Aerosol Air Qual Res. 2021;21(8):210016. Available from: <https://doi.org/10.4209/aaqr.210016>.
4. Gerdes ME, Miko S, Kunz JM, Hannapel EJ, Hlavsa MC, Hughes MJ, et al. **Estimating Waterborne Infectious Disease Burden by Exposure Route, United States, 2014**. Emerg Infect Dis. 2023;29(7):1357-66. Available from: https://wwwnc.cdc.gov/eid/article/29/7/23-0231_article#:~:text=Of%20the%20estimated%207.15%20million,and%206%25%20to%20NRND%20water.
5. Guma M, Drasar V, Santandreu B, Cano R, Afshar B, Nicolau A, et al. **A community outbreak of Legionnaires' disease caused by outdoor hot tubs for private use in a hotel**. Front Microbiol. 2023;14:1137470. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/37180254>.
6. Kirpich A, Shishkin A, Lhewa P, Yang C, von Fricken ME, Norris MH, et al. **An investigation of the seasonal relationships between meteorological factors, water quality, and sporadic cases of Legionnaires' disease in Washington, DC**. Epidemiol Infect. 2023;151:e88. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/37183701>.
7. Simcoe Muskoka District Health Unit. **Blue-green algae**. Simcoe, ON: Simcoe Muskoka District Health Unit; 2023 06 15 Jun. Available from: https://www.simcoemuskokahealth.org/Topics/SafeWater/bluegreenalgae_copy1.aspx.

SMALL WATER SYSTEMS

1. Dupke S, Buchholz U, Fastner J, Förster C, Frank C, Lewin A, et al. **Impact of climate change on waterborne infections and intoxications**. J Health Monit. 2023;8(Suppl 3):62-77. Available from: <https://doi.org/10.25646/2F11402>.

WASTEWATER, OTHER

1. Grassa JL. **Why scientists say wastewater surveillance needs to continue, despite low COVID-19 levels**. CBC News. 2023 Jul 9. Available from: <https://www.cbc.ca/news/health/covid-19-wastewater-canada-data-1.6896416>.
2. Keshaviah A, Diamond MB, Wade MJ, Scarpino SV, Ahmed W, Amman F, et al. **Wastewater monitoring can anchor global disease surveillance systems**. The Lancet Global Health. 2023;11(6):e976-e81. Available from: [https://doi.org/10.1016/S2214-109X\(23\)00170-5](https://doi.org/10.1016/S2214-109X(23)00170-5).

4. CLIMATE CHANGE

EXTREME WEATHER

1. Baharav Y, Nichols L, Wahal A, Gow O, Shickman K, Edwards M, et al. **The impact of extreme heat exposure on pregnant people and neonates: a state of the science review.** J Midwifery Womens Health. 2023;68(3):324-32. Available from: <https://doi.org/10.1111/jmwh.13502>.
2. Ballester J, Quijal-Zamorano M, Méndez Turrubiates RF, Pegenaute F, Herrmann FR, Robine JM, et al. **Heat-related mortality in Europe during the summer of 2022.** Nat Med. 2023;29(7):1857-66. Available from: <https://doi.org/10.1038/s41591-023-02419-z>.
3. BC Centre for Disease Control. **Medications and heat [poster].** Vancouver, BC: BCCDC; 2023 Jul. Available from: <https://www.healthlinkbc.ca/sites/default/files/documents/Medications%20and%20Heat%20HealthLink%20230621.pdf>.
4. Beugin D, Clark D, Miller S, Ness R, Pelai R, Wale J. **The case for adapting to extreme heat. Costs of the 2021 B.C. heat wave.** Canadian Climate Institute; 2023 Jul. Available from: <https://climateinstitute.ca/wp-content/uploads/2023/06/The-case-for-adapting-to-extreme-heat-costs-of-the-BC-heat-wave.pdf>.
5. Caan W. **Poor housing is a problem in heatwaves as well as cold weather.** BMJ. 2023;382:1498. Available from: <https://doi.org/10.1136/bmj.p1498>.
6. Canadian Climate Institute. **Extreme heat.** Canadian Climate Institute; 2023 Jul. Available from: <https://climateinstitute.ca/reports/extreme-heat-in-canada/>.
7. Casey JA, Parks RM, Bruckner TA, Gemmill A, Catalano R. **Excess injury mortality in Washington State during the 2021 heat wave.** Am J Public Health. 2023;113(6):657-60. Available from: <https://ajph.aphapublications.org/doi/abs/10.2105/AJPH.2023.307269>.
8. Cianconi P, Hanife B, Grillo F, Betro S, Lesmana CBJ, Janiri L. **Eco-emotions and psychoterratic syndromes: reshaping mental health assessment under climate change.** Yale J Biol Med. 2023;96(2):211-26. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/37396973>.
9. Clark B. **Could extreme heat make it harder to breastfeed?** 2023 [updated Jun 15]; Available from: <https://www.medpagetoday.com/opinion/second-opinions/105026?trw=no>.
10. Covert HH, Abdoel Wahid F, Wenzel SE, Lichtveld MY. **Climate Change Impacts on Respiratory Health: Exposure, Vulnerability, and Risk.** Physiol Rev. 2023. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/37326296>.
11. Dangerfield K. **'Recipe for potential disaster': The hazards of extreme heat, wildfire smoke on your pet.** The Globe and Mail. 2023 Jul 5. Available from: <https://globalnews.ca/news/9809458/heat-wildfire-smoke-pets-health/>.
12. Eker S, Mastrucci A, Pachauri S, van Ruijven B. **Social media data shed light on air-conditioning interest of heat-vulnerable regions and sociodemographic groups.** One earth (Cambridge, Mass). 2023;6(4):428-40. Available from: <https://doi.org/10.1016/j.oneear.2023.03.011>.
13. Feathers S. **Health checks during extreme heat events – NCEH in Canada.** WalkEarth; 2023 06 24 Jul 24. Available from: <https://walkearth.org/2023/06/24/health-checks-during-extreme-heat-events-nceh-in-canada/>.
14. Futterman ID, Grace H, Weingarten S, Borjian A, Clare CA. **Maternal anxiety, depression and posttraumatic stress disorder (PTSD) after natural disasters: a systematic review.** The Journal

- of Maternal-Fetal & Neonatal Medicine. 2023;36(1):2199345. Available from: <https://doi.org/10.1080/14767058.2023.2199345>.
15. Henderson SB, McLean KE, Ding Y, Yao J, Turna NS, McVea D, et al. **Hot weather and death related to acute cocaine, opioid and amphetamine toxicity in British Columbia, Canada: a time-stratified case-crossover study.** CMAJ Open. 2023;11(3):E569-e78. Available from: <https://doi.org/10.9778%2Fcmajo.20210291>.
 16. Huang Y, Zhang T, Lou J, Wang P, Huang L. **Effective interventions on health effects of Chinese rural elderly under heat exposure.** Frontiers of environmental science & engineering. 2022;16(5):66. Available from: <https://link.springer.com/article/10.1007/s11783-022-1545-4>.
 17. Interior Health. **Heat response planning for Southern Interior B.C. communities: a toolkit.** Kelowna, BC: Interior Health; 2023 Jun. Available from: <https://www.interiorhealth.ca/sites/default/files/PDFS/heat-alert-response-planning-toolkit.pdf>.
 18. Lee MJ, McLean KE, Kuo M, Richardson GRA, Henderson SB. **Chronic diseases associated with mortality in British Columbia, Canada during the 2021 Western North America extreme heat event.** Geohealth. 2023;7(3):e2022GH000729. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36938119>.
 19. Lu K, Ban J, Wang Q, Li T. **Protocol for estimating exposure to compound heat wave and ozone pollution under future climate change.** STAR protocols. 2023;4(1):102090. Available from: <https://www.sciencedirect.com/science/article/pii/S2666166723000485>.
 20. Lynch L. **How to protect the poorest Canadians from hotter summers [podcast].** CBC Radio. 2023 07 02 Jul 2. Available from: <https://www.cbc.ca/player/play/2239672387730>.
 21. Makrufardi F, Manullang A, Rusmawatingtyas D, Chung KF, Lin SC, Chuang HC. **Extreme weather and asthma: a systematic review and meta-analysis.** Eur Respir Rev. 2023;32(168). Available from: <https://doi.org/10.1183%2F16000617.0019-2023>.
 22. Phillips T. **Keeping our cool: preventing overheated buildings in the climate crisis [HBE webinar].** Vancouver, BC: National Collaborating Centre for Environmental Health; 2023 07 20 Jul 20. Available from: <https://ncceh.ca/events/upcoming-webinars/keeping-our-cool-preventing-overheated-buildings-climate-crisis>.
 23. Puntub W, Schnitfinke T, Fleischhauer M, Birkmann J, Garschagen M, Sandholz S, et al. **Linking science and practice in participatory future-oriented assessment and planning of human heat stress vulnerability in Bonn, Germany.** J Environ Planning Manage. 2023;66(9):1918-37. Available from: <https://doi.org/10.1080/09640568.2022.2043260>.
 24. Quitmann C, Griesel S, Nayna Schwerdtle P, Danquah I, Herrmann A. **Climate-sensitive health counselling: a scoping review and conceptual framework.** The Lancet Planetary Health. 2023;7(7):e600-e10. Available from: [https://doi.org/10.1016/S2542-5196\(23\)00107-9](https://doi.org/10.1016/S2542-5196(23)00107-9).
 25. Sturino I. **Extreme weather impacts our health – especially as we age. But Sunnybrook’s Dr. Susan Deering has a prescription for how to adapt.** 2023 06 19; Available from: <https://health.sunnybrook.ca/featured/extreme-weather-impacts-our-health-how-to-adapt/>.
 26. Vancouver Coastal Health, Fraser Health. **Schools and wildfire smoke.** Vancouver, BC: VCH and FH; 2023 Jun. Available from: <https://www.vch.ca/en/document-library/schools-wildfire-smoke>.
 27. Vancouver Coastal Health, Fraser Health. **Heat check-in support framework for non-governmental organizations.** Vancouver, BC: VCH and FH; 2023 Jun. Available from: <https://www.vch.ca/en/media/13701>.

28. Vancouver Coastal Health, Fraser Health. **Extreme heat preparedness. Summer heat, smoke and health: recommended actions for owners and managers of rental and strata housing.** Vancouver, BC: VCH and FH; 2023 Jun. Available from: <https://www.vch.ca/en/media/13676>.
29. Yazdani M, Haghani M. **A dynamic emergency planning system for relocating vulnerable people to safe shelters in response to heat waves.** Expert Systems with Applications. 2023;228. Available from: <https://doi.org/10.1016/j.eswa.2023.120224>.

FLOODING

1. Yang W, Zhang J, Krebs P. **Investigating flood exposure induced socioeconomic risk and mitigation strategy under climate change and urbanization at a city scale.** Journal of Cleaner Production. 2023;387:135929. Available from: <https://www.sciencedirect.com/science/article/pii/S0959652623000872>.
2. Yazdani M, Haghani M. **Elderly people evacuation planning in response to extreme flood events using optimisation-based decision-making systems: A case study in western Sydney, Australia. Knowledge-Based Systems.** 2023;274. Available from: <https://doi.org/10.1016/j.knosys.2023.110629>.

SEA LEVEL RISE

WILDFIRES, OTHER

1. Dhingra R, Keeler C, Staley BS, Jardel HV, Ward-Caviness C, Rebuli ME, et al. **Wildfire smoke exposure and early childhood respiratory health: a study of prescription claims data.** Environ Health. 2023;22(1):48. Available from: <https://doi.org/10.1186/s12940-023-00998-5>.
2. Erdenesanaa D. **The emerging science of tracing smoke back to wildfires.** The New York Times. 2023 Jun 28. Available from: <https://www.nytimes.com/2023/06/28/us/the-emerging-science-of-tracing-smoke-back-to-wildfires.html>.
3. Flores I, Ortuño MT, Tirado G. **A goal programming model for early evacuation of vulnerable people and relief distribution during a wildfire.** Saf Sci. 2023;164. Available from: <https://doi.org/10.1016/j.ssci.2023.106117>.
4. Melton CC, De Fries CM, Smith RM, Mason LR. **Wildfires and older adults: a scoping review of impacts, risks, and interventions.** Int J Environ Res Public Health. 2023;20(13):6252. Available from: <https://www.mdpi.com/1660-4601/20/13/6252>.
5. Palinkas LA, De Leon J, Yu K, Salinas E, Fernandez C, Johnston J, et al. **Adaptation resources and responses to wildfire smoke and other forms of air pollution in low-income urban settings: a mixed-methods study.** Int J Environ Res Public Health. 2023;20(7). Available from: <https://www.ncbi.nlm.nih.gov/pubmed/37048007>.
6. Pan in BC. **Emergency preparedness: wildfire smoke and air quality.** Public Health Agency of Canada Emergency Preparedness and Response; 2023 Jun. Available from: <https://paninbc.ca/2023/06/26/emergency-preparedness-wildfire-smoke-and-air-quality/>.
7. Public Health Agency of Canada. **Public health risk profile: wildfires in Canada, 2023.** Ottawa, ON: Government of Canada; 2023 07 07 Jul 7. Available from: <https://www.canada.ca/en/public-health/services/emergency-preparedness-response/rapid-risk-assessments-public-health-professionals/risk-profile-wildfires-2023.html>.

8. S & P Global. **Listen: How the Canadian wildfires impact business, net-zero, health [podcast]**. S & P Global; 2023 06 23 Jun 23. Available from: <https://www.spglobal.com/esg/podcasts/how-the-canadian-wildfires-impact-business-net-zero-health>.
9. Tinoco N. **Post-disaster (im)mobility aspiration and capability formation: case study of Southern California wildfire**. *Popul Environ*. 2023;45(2):4. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/37091045>.

5. BUILT ENVIRONMENT

GREEN & BLUE SPACES

1. Juntti M, Ozsezer-Kurnuc S. **Factors influencing the realisation of the social impact of urban nature in inner-city environments: A systematic review of complex evidence**. *Ecological Economics*. 2023;211:107872. Available from: <https://www.sciencedirect.com/science/article/pii/S0921800923001350>.

HOUSING

NOISE, OTHER

1. Aasvang GM, Stockfelt L, Sørensen M, Turunen AW, Roswall N, Yli-Tuomi T, et al. **Burden of disease due to transportation noise in the Nordic countries**. *Environ Res*. 2023;231:116077. Available from: <https://www.sciencedirect.com/science/article/pii/S0013935123008691>.
2. Bolouki A. **Neurobiological effects of urban built and natural environment on mental health: systematic review**. *Rev Environ Health*. 2023;38(1):169-79. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/35112526>.
3. Bower M, Kent J, Patulny R, Green O, McGrath L, Teesson L, et al. **The impact of the built environment on loneliness: A systematic review and narrative synthesis**. *Health Place*. 2023;79:102962. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36623467>.
4. UK Health Security Agency. **Noise pollution: mapping the health impacts of transportation noise in England**. London, UK: UK Government; 2023 Jun 29. Available from: <https://ukhsa.blog.gov.uk/2023/06/29/noise-pollution-mapping-the-health-impacts-of-transportation-noise-in-england/>.
5. Wyerman B, Unetich R. **Pickleball Sound 101 - The statistics of pickleball sound and a recommended noise standard for pickleball play**. *INTER-NOISE and NOISE-CON Congress and Conference Proceedings*. 2023;266(2):1-9. Available from: https://doi.org/10.3397/NC_2023_0001.

PLANNING & DESIGN

1. Bonaccorsi G, Milani C, Giorgetti D, Setola N, Naldi E, Manzi F, et al. **Impact of built environment and neighborhood on promoting mental health, well-being, and social participation in older people: an umbrella review**. *Ann Ig*. 2023;35(2):213-39. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/35788248>.

2. Dunn JR, Halapy E, Moineddin R, Young M. **Short-term impact of a neighbourhood-based intervention on mental health and self-rated health in Hamilton, Ontario, Canada.** Health Place. 2023;83:103052. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/37459666>.
3. McCulloch E, Macpherson A, Hagel B, Giles A, Fuselli P, Pike I, et al. **Road safety, health equity, and the built environment: perspectives of transport and injury prevention professionals in five Canadian municipalities.** BMC Public Health. 2023 06 22;23(1):1211. Available from: <https://doi.org/10.1186/s12889-023-16115-7>.
4. Perera ATD, Zhao B, Wang Z, Soga K, Hong T. **Optimal design of microgrids to improve wildfire resilience for vulnerable communities at the wildland-urban interface.** Applied Energy. 2023;335. Available from: <https://doi.org/10.1016/j.apenergy.2023.120744>.
5. Urban Design 4 Health (UD4H). **National Public Health Assessment Model (N-PHAM).** Washington, DC: US Environmental Protection Agency; 2023; Available from: <https://urbandesign4health.com/projects/hia-plug-in-scenario-planning>.
6. Wang Y, Steenbergen B, van der Krabben E, Kooij H-J, Raaphorst K, Hoekman R. **The impact of the built environment and social environment on physical activity: a scoping review.** Int J Environ Res Public Health. 2023;20(12):6189. Available from: <https://www.mdpi.com/1660-4601/20/12/6189>.

TRANSPORTATION, OTHER

6. NON-CLIMATE RELATED DISASTERS

EARTHQUAKES

MARINE

TERRESTRIAL, OTHER

1. Brody S, Loree S, Sampson M, Mensinkai S, Coffman J, Mueller MH, et al. **Searching for evidence in public health emergencies: a white paper of best practices.** J Med Libr Assoc. 2023;111(1-2):566-78. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/37312802>.
2. Lee JM, Jansen R, Sanderson KE, Guerra F, Keller-Olaman S, Murti M, et al. **Public health emergency preparedness for infectious disease emergencies: a scoping review of recent evidence.** BMC Public Health. 2023;23(1):420. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36864415>.

7. DISEASES, VECTORS, PESTS

COVID-19

1. Bai H, He L-Y, Gao F-Z, Wu D-L, Yao K-S, Zhang M, et al. **Airborne antibiotic resistome and human health risk in railway stations during COVID-19 pandemic.** *Environ Int.* 2023;172:107784. Available from: <https://doi.org/10.1016/j.envint.2023.107784>.
2. Balloux F, Tan C, van Dorp L. **We found coronaviruses in UK bats – so far the danger’s minimal but we need to know more about viruses that can spread to humans.** *The Conversation.* 2023 Jun 27. Available from: <https://theconversation.com/we-found-coronaviruses-in-uk-bats-so-far-the-dangers-minimal-but-we-need-to-know-more-about-viruses-that-can-spread-to-humans-208375>.
3. Brainard J, Jones NR, Harrison FCD, Hammer CC, Lake IR. **Super-spreaders of novel coronaviruses that cause SARS, MERS and COVID-19: a systematic review.** *Ann Epidemiol.* 2023;82:66. Available from: <https://doi.org/10.1016/j.annepidem.2023.03.009>.
4. Ebrahimi T, Shamshiri AR, Alebouyeh M, Mohebbi SZ. **Effectiveness of mouthwashes on reducing SARS-CoV-2 viral load in oral cavity: a systematic review and meta-analysis.** *BMC Oral Health.* 2023;23(1):443. Available from: <https://doi.org/10.1186/s12903-023-03126-4>.
5. Jones EJ, Ayling K, Wiley CR, Geraghty AWA, Greer AL, Holt-Lunstad J, et al. **Psychology Meets Biology in COVID-19: What We Know and Why It Matters for Public Health.** *Policy Insights Behav Brain Sci.* 2023;10(1):33-40. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36942265>.
6. Public Health Ontario. **Coronavirus Disease 2019 (COVID-19).** Toronto, ON: Public Health Ontario; 2023 06 20 Jun. Available from: <https://www.publichealthontario.ca/-/media/documents/ncov/ncov-daily-lit.pdf?la=en>.
7. Saulnier A, Wendling JM, Hermant B, Lepelletier D. **SARS-CoV-2 transmission modes: Why and how contamination occurs around shared meals and drinks?** *Food Microbiol.* 2023;114:104297. Available from: <https://doi.org/10.1016%2Fj.fm.2023.104297>.

OTHER INFECTIOUS DISEASES

1. Fong D, Bos C, Stuart T, Perron S, Kosatsky T, Shum M. **Prevention, identification, and treatment options for the management of bed bug infestations.** *Environ Health Rev.* 2012;55(04):89-102. Available from: <https://pubs.ciphi.ca/doi/abs/10.5864/d2012-013>.
2. Mulliken JS, Hampshire KN, Rappold AG, Fung M, Babik JM, Doernberg SB. **Risk of systemic fungal infections after exposure to wildfires: a population-based, retrospective study in California.** *The Lancet Planetary Health.* 2023;7(5):e381-e6. Available from: [https://doi.org/10.1016/S2542-5196\(23\)00046-3](https://doi.org/10.1016/S2542-5196(23)00046-3).

VECTORS AND ZOOSES

1. Beermann S, Dobler G, Faber M, Frank C, Habedank B, Hagedorn P, et al. **Impact of climate change on vector- and rodent-borne infectious diseases.** *J Health Monit.* 2023;8(Suppl 3):33-61. Available from: <https://doi.org/10.25646/11401>.
2. CanLyme Team. **Q&A panel FAQ summary – The Quiet Epidemic.** CanLyme Team; 2023 07 12 Jul 12. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4466818/> and/or other co-infections. <https://ncceh.ca/documents/evidence-review/review-ticks-canada-and-health-risks-exposure>.

3. CBC News. **Ontario is now tracking three additional tick-borne illnesses.** 2023 Jul 3. Available from: <https://www.cbc.ca/player/play/2241343555964>.
4. CTV News. **Dozens of cats in Poland had bird flu but the risk to people is low, the UN health agency says.** CTV News; 2023 Jul 12. Available from: <https://www.ctvnews.ca/health/dozens-of-cats-in-poland-had-bird-flu-but-the-risk-to-people-is-low-the-un-health-agency-says-1.6482398>.
5. Hassan OA, de Balogh K, Winkler AS. **One Health early warning and response system for zoonotic diseases outbreaks: Emphasis on the involvement of grassroots actors.** Veterinary Medicine and Science. 2023. Available from: <https://onlinelibrary.wiley.com/doi/abs/10.1002/vms3.1135>.
6. Jato-Espino D, Mayor-Vitoria F, Moscardó V, Capra-Ribeiro F, Bartolomé del Pino LE. **Toward One Health: a spatial indicator system to model the facilitation of the spread of zoonotic diseases.** Front Public Health. 2023;11. Available from: <https://www.frontiersin.org/articles/10.3389/fpubh.2023.1215574>.
7. O’Keeffe J. **Avian influenza A(H5N1) and the continuing outbreak [evidence brief].** Vancouver, BC: National Collaborating Centre for Environmental Health; 2023 07 11 Jul 11. Available from: <https://ncceh.ca/content/blog/reducing-tick-related-risks-through-improved-design-and-maintenance-outdoor>.
8. Tan CCS, Trew J, Peacock TP, Mok KY, Hart C, Lau K, et al. **Genomic screening of 16 UK native bat species through conservationist networks uncovers coronaviruses with zoonotic potential.** Nature Communications. 2023;14(1):3322. Available from: <https://doi.org/10.1038/s41467-023-38717-w>.
9. Tufts DM, Adams B, Diuk-Wasser MA. **Ecological interactions driving population dynamics of two tick-borne pathogens, *Borrelia burgdorferi* and *Babesia microti*.** Proceedings of the Royal Society B: Biological Sciences. 2023;290(2001):20230642. Available from: <https://royalsocietypublishing.org/doi/abs/10.1098/rspb.2023.0642>.
10. World Health Organization. **Ongoing avian influenza outbreaks in animals pose risk to humans.** Geneva, Switzerland: WHO; 2023 Jul 12. Available from: https://www.who.int/news/item/12-07-2023-ongoing-avian-influenza-outbreaks-in-animals-pose-risk-to-humans?utm_source=Institut+national+de+sant%C3%A9+publique+du+Qu%C3%A9bec&utm_campaign=540be6ea4e-ZOONOSES_2023_06_21_COPY_01&utm_medium=email&utm_term=0_b5d9f3a57e-540be6ea4e-446203185.

PESTS, OTHER

1. Coughlin K. **It’s official: Health Canada’s pest control management agency codifies its approach to treated articles.** Gowling WLG; 2023 Jul. Available from: https://gowlingwlg.com/en/insights-resources/articles/2023/health-canada-pest-control-management-agency/?utm_source=mondaq&utm_medium=syndication&utm_term=Food-Drugs-Healthcare-Life-Sciences&utm_content=articleoriginal&utm_campaign=article.
2. Snyman J, Snyman LP, Buhler KJ, Villeneuve C-A, Leighton PA, Jenkins EJ, et al. **California Serogroup Viruses in a Changing Canadian Arctic: A Review.** Viruses. 2023;15(6):1242. Available from: <https://www.mdpi.com/1999-4915/15/6/1242>.
3. US Centers for Disease Control and Prevention. **QuickStats: Number of Deaths from Hornet, Wasp, and Bee Stings Among Males and Females — National Vital Statistics System, United States, 2011–2021.** MMWR Morb Mortal Wkly Rep. 2023;72(756). Available from: <http://dx.doi.org/10.15585/mmwr.mm7227a6>.

- Vlaanderen EJ, Ghaly TM, Moore LR, Focardi A, Paulsen IT, Tetu SG. **Plastic leachate exposure drives antibiotic resistance and virulence in marine bacterial communities.** Environ Pollut. 2023;327:121558. Available from: <https://www.sciencedirect.com/science/article/pii/S0269749123005602>.

8. PUBLIC HEALTH FUNDAMENTALS

COMMUNICATION

- Canadian Public Health Association. **Resources and services - tools.** Ottawa, ON: CPHA; 2023 06 29; Available from: <https://www.cpha.ca/tools>.
- Fuoco RE, Kwiatkowski CF, Birnbaum LS, Blum A. **Effective communications strategies to increase the impact of environmental health research.** Environ Health. 2023;22(1):47. Available from: <https://doi.org/10.1186/s12940-023-00997-6>.

HEALTH PROMOTION

- Gosselin S, Thaivalappil A, Papadopoulos A, Mc WJ. **Public Health Messaging to Address Indoor Tanning: A Scoping Review.** J Health Commun. 2023;28(4):241-53. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36992625>.

HEALTH IMPACT ASSESSMENT

- Kingsbury P, Abajian H, Abajian M, Angyan P, Espinoza J, MacDonald B, et al. **SEndAE: A resource for expanding research into social and environmental determinants of health.** Comput Methods Programs Biomed. 2023;238:107542. Available from: <https://www.sciencedirect.com/science/article/pii/S0169260723002079>.
- Weber E, Downward GS, Ebi KL, Lucas PL, van Vuuren D. **The use of environmental scenarios to project future health effects: a scoping review.** The Lancet Planetary Health. 2023;7(7):e611-e21. Available from: [https://doi.org/10.1016/S2542-5196\(23\)00110-9](https://doi.org/10.1016/S2542-5196(23)00110-9).

HEALTH EQUITY

- Deivanayagam TA, English S, Hickel J, Bonifacio J, Guinto RR, Hill KX, et al. **Envisioning environmental equity: climate change, health, and racial justice.** Lancet. 2023;402(10395):64-78. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/37263280>.
- National Academies of Sciences Engineering Medicine, editor. **Communities, Climate Change, and Health Equity – Lessons Learned in Addressing Inequities in Heat-Related Climate Change Impacts [workshop]. June 20th and June 21st, 2023 | 12:00PM – 4:00PM ET; 2023: National Academies of Sciences Engineering Medicine.** Available from: <https://www.nationalacademies.org/documents/embed/link/LF2255DA3DD1C41C0A42D3BEF0989ACAEC3053A6A9B/file/DF24041C111E6DC4ACAC5299B0F6A1E06DF78F9EFAE8?noSaveAs=1>.

ONE HEALTH, OTHER

- Büth CM, Barbour N, Abdel-Aty M. **Effectiveness of bicycle helmets and injury prevention: a systematic review of meta-analyses.** Sci Rep. 2023;13(1):8540. Available from: <https://doi.org/10.1016%2Fj.rser.2023.113378>.

2. Kearl Z, Vogel J. **Urban extreme heat, climate change, and saving lives: Lessons from Washington state.** *Urban Climate.* 2023;47:101392. Available from: <https://www.sciencedirect.com/science/article/pii/S2212095522003108>.
3. Public Health Agency of Canada Western Region, BC Centre for Disease Control. **Building Hope Through Climate Change Action: BC Case Studies Report.** Vancouver, BC: PHAC and BCCDC; 2023 Jun. Available from: https://media2-production.mightynetworks.com/asset/41125518-986e-4bbd-bd54-cc61bc7f5960/Building_Hope_Through_Climate_Action.pdf?_gl=1*eftly*_ga*MzY1ODUxNTMuMTY4OTY5NDcxNw..*_ga_T49FMYQ9FZ*MTY4OTY5NDcxNy4xLjEuMTY4OTY5NDg4OC4wLjAuMA..
4. Ubong D, Stewart L, Sepai O, Knudsen LE, Berman T, Reynders H, et al. **Application of human biomonitoring data to support policy development, raise awareness and environmental public health protection among countries within the HBM4EU project.** *Int J Hyg Environ Health.* 2023;251:114170. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/37207539>.
5. Weinberger KR, Girma B, Clougherty JE, Sheffield PE. **Inclusion of child-relevant data in the development and validation of heat vulnerability indices: a commentary.** *Environ Res Health.* 2023;1(3):033001. Available from: <https://doi.org/10.1088%2F2752-5309%2Faccdd8a>.
6. Zeighami A, Kern J, Yates AJ, Weber P, Bruno AA. **U.S. West Coast droughts and heat waves exacerbate pollution inequality and can evade emission control policies.** *Nature communications.* 2023;14(1):1415. Available from: <https://www.nature.com/articles/s41467-023-37080-0#:~:text=Our%20results%20indicate%20that%20dry,bear%20a%20higher%20pollution%20burden.>

9. OTHER TOPICS

CANNABIS PRODUCTS

1. Capler NR, Balneaves LG, Buxton JA, Kerr T. **Reasonable access: important characteristics and perceived quality of legal and illegal sources of cannabis for medical purposes in Canada.** *Journal of Cannabis Research.* 2023 07 01;5(1):18. Available from: <https://doi.org/10.1186/s42238-023-00185-w>.
2. Chmielinski MJ, Ehrlich PO, Cohen M, Isaksen TMB, Simpson CD. **Ultraviolet radiation exposure in cannabis-growing facilities.** *J Occup Environ Hyg.* 2023:1-11. Available from: <https://doi.org/10.1080/15459624.2023.2207616>.
3. Fischer B, Lindner SR, Jutras-Aswad D, Hall W. **Cannabis use and health-related ‘harm-to-others’: Towards a conceptual framework and evidence-base for public health.** *J Stud Alcohol Drugs.* 2023. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36971753>.
4. Hall W, Stjepanovic D, Dawson D, Leung J. **The implementation and public health impacts of cannabis legalization in Canada: a systematic review.** *Addiction.* 2023. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/37380613>.

TOBACCO, NICOTINE PRODUCTS

1. Rose JJ, Krishnan-Sarin S, Exil VJ, Hamburg NM, Fetterman JL, Ichinose F, et al. **Cardiopulmonary Impact of Electronic Cigarettes and Vaping Products: A Scientific Statement From the**

American Heart Association. Circulation. 2023(0). Available from:
<https://www.ahajournals.org/doi/abs/10.1161/CIR.0000000000001160>.

IONIZING, NON-IONIZING RADIATION

PERSONAL SERVICES ESTABLISHMENTS, OTHER

1. Baccarelli A, Dolinoy DC, Walker CL. **A precision environmental health approach to prevention of human disease.** Nat Commun. 2023;14(1):2449. Available from:
<https://www.ncbi.nlm.nih.gov/pubmed/37117186>.
2. Lenthang M. **New HIV cases linked to shuttered New Mexico salon that offered ‘vampire facials’.** NBC News. 2023 Jul 7. Available from: <https://www.nbcnews.com/news/us-news/hiv-cases-linked-new-mexico-salon-vampire-facials-rcna93054>.
3. Sokan-Adeaga AA, Sokan-Adeaga MA, Sokan-Adeaga ED, Oparaji AN, Edris H, Tella EO, et al. **Environmental toxicants and health adversities: A review on interventions of phytochemicals.** J Public Health Res. 2023;12(2):22799036231181226. Available from:
<https://www.ncbi.nlm.nih.gov/pubmed/37440795>.

10.SPECIFIC POPULATIONS

CHILDREN

1. Bin Maideen MF, Jay O, Bongers C, Nanan R, Smallcombe JW. **Optimal low-cost cooling strategies for infant strollers during hot weather.** Ergonomics. 2023:1-15. Available from:
<https://doi.org/10.1080/00140139.2023.2172212>.
2. Chatziprodromidou IP, Chatziantoniou S, Vantarakis G, Vantarakis A. **Risk factor analysis of children’s exposure to microbial pathogens in playgrounds.** Risk Anal. 2022;42(2):334-43. Available from: <https://doi.org/10.1111/risa.13752>.
3. Hitch L, Kodali H, Starvaggi M, Wyka KE, Huang TT. **A systematic review on the relationship between the built environment and children’s quality of life.** Res Sq. 2023. Available from:
<https://www.ncbi.nlm.nih.gov/pubmed/37163113>.
4. Kline O, Prunicki M. **Climate change impacts on children’s respiratory health.** Curr Opin Pediatr. 2023;35(3):350-5. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/37057656>.
5. Lanza K, Alcazar M, Durand CP, Salvo D, Villa U, Kohl Iii HW. **Heat-resilient schoolyards: relations between temperature, shade, and physical activity of children during recess.** J Phys Act Health. 2023;20(2):134-41. Available from:
<https://journals.humankinetics.com/view/journals/jpah/20/2/article-p134.xml>.
6. Martenies SE, Zhang M, Corrigan AE, Kvit A, Shields T, Wheaton W, et al. **Developing a national-scale exposure index for combined environmental hazards and social stressors and applications to the Environmental Influences on Child Health Outcomes (ECHO) Cohort.** Int J Environ Res Public Health. 2023;20(14):6339. Available from: <https://www.mdpi.com/1660-4601/20/14/6339>.
7. Pathak N. **How climate change harms children’s health.** Yale Climate Connections. 2023. Available from: <https://yaleclimateconnections.org/2023/06/how-climate-change-harms-childrens-health/>.

8. Perera F. **Children's Health and the Peril of Climate Change**. 2023. Available from: <https://global.oup.com/academic/product/childrens-health-and-the-peril-of-climate-change-9780197588161?cc=ca&lang=en&>.
9. Robles-Lopez K, Barar H, Clarke DF, Julich K. **Impact of the 2021 North American winter storms on children with epilepsy**. *Epilepsy & behavior reports*. 2023;21:100592. Available from: <https://doi.org/10.1016/j.ebr.2023.100592>.

INDIGENOUS PEOPLES

1. Degois J, Veillette M, Poulin P, Lévesque B, Aubin D, Ouazia B, et al. **Indoor air quality assessment in dwellings with different ventilation strategies in Nunavik and impacts on bacterial and fungal microbiota**. *Indoor Air*. 2021;31(6):2213-25. Available from: <https://doi.org/10.1111/ina.12857>.
2. Livingstone KM, Love P, Mathers JC, Kirkpatrick SI, Olstad DL. **Cultural adaptations and tailoring of public health nutrition interventions in Indigenous peoples and ethnic minority groups: opportunities for personalised and precision nutrition**. *Proc Nutr Soc*. 2023:1-9. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/37334485>.
3. One Health Alberta. **Alberta / NWT First Nations Health Portal**. 2023 07 04; Available from: <https://www.onehealth.ca/ab/Home/Health-Emergency-Management>.
4. Schreiber Y, Mallach G, Barrowman N, Tsampalieros A, Kelly L, Gordon J, et al. **Skin morbidity in Indigenous children in relation to housing conditions in remote communities in Northwestern Ontario, Canada**. *Clin Exp Dermatol*. 2023;48(3):218-24. Available from: <https://doi.org/10.1093/ced/llac082>.
5. Stalwick JA, Ratelle M, Gurney KEB, Drysdale M, Lazarescu C, Comte J, et al. **Sources of exposure to lead in Arctic and subarctic regions: a scoping review**. *Int J Circumpolar Health*. 2023;82(1):2208810. Available from: <https://doi.org/10.1080/22423982.2023.2208810>.

OLDER ADULTS

1. Azim FT, Ariza-Vega P, Gardiner PA, Ashe MC. **Indoor built environment and older adults' activity: a systematic review**. *Can J Aging*. 2023;42(2):241-58. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/35848156>.
2. Figueiredo M, Eloy S, Marques S, Dias L. **Older people perceptions on the built environment: A scoping review**. *Appl Ergon*. 2023;108:103951. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36480999>.
3. He R, Tsoulou I, Thirumurugesan S, Morgan B, Gonzalez S, Plotnik D, et al. **Effect of heatwaves on PM2.5 levels in apartments of low-income elderly population. A case study using low-cost air quality monitors**. *Atmos Environ*. 2023;301. Available from: <https://doi.org/10.1016/j.atmosenv.2023.119697>.
4. Kohon JN, Tanaka K, Himes D, Toda E, Carder PC, Carlson B. **Extreme heat vulnerability among older adults: a multi-level risk index for Portland, Oregon**. *The Gerontologist*. 2023. Available from: <https://doi.org/10.1093/geront/gnad074>.
5. National Collaborating Centre for Determinants of Health. **Learning from Practice: Promoting wellbeing and health equity among older adults**. Antigonish, NS: St Francis Xavier University; 2023 Jun. Available from: https://nccdh.ca/resources/entry/promoting-wellbeing-and-health-equity-among-older-adults?mc_cid=61eddba180&mc_eid=04816d6ac3.

6. Stearns JA, Avedzi HM, Yim D, Spence JC, Labbaf F, Lamboglia CG, et al. **An umbrella review of the best and most up-to-date evidence on the built environment and physical activity in older adults ≥ 60 years.** Public Health Rev. 2023;44:1605474. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36968807>.

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

To provide feedback on this document, please visit www.ncceh.ca/en/document_feedback

This document can be cited as: National Collaborating Centre for Environmental Health. Environmental health research scan. Vancouver, BC: NCCEH. 2023 July.

Permission is granted to reproduce this document in whole, but not in part. Production of this document has been made possible through a financial contribution from the Public Health Agency of Canada through the National Collaborating Centre for Environmental Health.