

ENVIRONMENTAL HEALTH RESEARCH SCAN

WITH COVID-19 SECTIONS

VOL 7 (3) MARCH 2023



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Environmental Health (EH) Research Scan: Aims and Scope

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 This research scan is not peer reviewed; it does not cover all research, news, and information, and NCCEH is not responsible for the accuracy of the content from media or databases.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

COVID-19 Publications are listed in the sections above and there are also **COVID-19 [Additional Topics](#)**.

EDITOR PICKS

Air quality sensor lending libraries: bringing home public health [journal article]

Angela Eykelbosh (right), Knowledge Translation Scientist, NCCEH, and Anne-Marie Nicol, Knowledge Translation Scientist, NCCEH

“...municipalities have the opportunity, in collaboration with local public health to address unknown or hazardous IAQ through research, local regulatory action (by-laws), as well as innovative awareness-raising initiatives such as air sensor lending programs.”



Review of environmental management strategies to reduce tick populations [evidence review]

Negar Elmieh, Quest University Canada

“This review highlights the need for an integrated-pest management approach to reduce tick habitats and/or limit human interaction with tick hot spots. This should utilize a combination of environmental management strategies across private and recreational properties.”



The impacts of climate and land use change on tick-related risks [evidence review]

Negar Elmieh, Quest University Canada

“The aim of this document is to review environmental factors that contribute to tick-related risks. This is the second document in a four-part series focussing on the risks of tick exposure in Canada.”



A guide to post-flooding community-level psychosocial response and recovery in Canada [evidence review]

Maxine Myre (right) and Nicole Glenn, PolicyWise for Children and Families

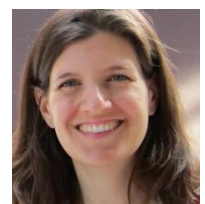
“In this guide, PolicyWise identifies and describes post-flooding practices that Canadian public health professionals can adapt and apply in their local context. We also outline contextual factors that may influence the effectiveness of these practices for diverse communities and circumstances.”



Post-flooding community-level psychosocial impacts and priorities in Canada: a preliminary report [evidence review]

Nicole Glenn (right), Maxine Myre, PolicyWise for Children and Families

“An objective of this review is to increase decision makers’ understanding of the mental health and psychosocial well-being impacts of flooding on the people and communities affected, with emphasis on systemically excluded groups.”



Climate change and health: the IPCC Report and COP27 [webinar recording]

Sherilee Harper, Associate Professor in the School of Public Health at the University of Alberta

“In this presentation, the health findings from the latest Intergovernmental Panel on Climate Change (IPCC) report on climate change impacts and adaptation will be presented, and then linked to the United Nations Framework Convention on Climate Change COP27 and.” COP28



Public health practices to support psychosocial and mental health response and recovery post-flooding [upcoming webinar]

Maxine Myre (right), Nicole Glenn, PolicyWise for Children and Families

“This webinar will provide an overview of the experiences, challenges, and priorities of post-flooding community recovery, as well as describe public health practices that can be adapted and applied to communities across Canada.”



Community-based adaptation approaches to sea level rise and health [evidence review]

Tracey Wade, CLIMAtlantic

“The purpose of this third report is to review community-level planning approaches and determine if, and how, public health considerations for sea level rise have been incorporated into adaptation planning. The analysis summarizes current practice....”



February 2023 environmental health research scan with COVID-19 sections [blog]

National Collaborating Centre for Environmental Health

This monthly Research Scan highlights recent environmental health publications by topic and provides easy access to article abstracts and report summaries to support public health professionals, researchers, planners, students, and others working in public health.



February 2023 e-news [newsletter]

National Collaborating Centre for Environmental Health

This monthly newsletter highlights new resources, webinars, summits, announcements, research scans, and more.



January 2023 environmental health research scan with COVID-19 sections [blog]

National Collaborating Centre for Environmental Health



ENVIRONMENTAL HEALTH RESEARCH SCAN

SELECTED PUBLICATIONS

1. Elmieh N. **The impacts of climate and land use change on tick-related risks [evidence review]**. Vancouver, BC: National Collaborating Centre for Environmental Health; 2022 Nov 23. Available from: <https://ncceh.ca/documents/evidence-review/impacts-climate-and-land-use-change-tick-related-risks>.
2. Elmieh N. **Review of environmental management strategies to reduce tick populations [evidence review]**. Vancouver, BC: National Collaborating Centre for Environmental Health; 2023 Mar 9. Available from: <https://ncceh.ca/documents/evidence-review/review-environmental-management-strategies-reduce-tick-populations>.
3. Eykelbosh A, Nicol A-M. **Air quality sensor lending libraries: Bringing home public health [journal article]**. Environ Health Rev. 2022;65(4):109-13. Available from: <https://pubs.ciphi.ca/doi/abs/10.5864/d2022-023>.
4. Glenn N, Myre M. **Post-flooding community-level psychosocial impacts and priorities in Canada: a preliminary report [evidence review]**. Vancouver, BC: National Collaborating Centre for Environmental Health; 2022 Nov 22. Available from: <https://ncceh.ca/documents/evidence-review/post-flooding-community-level-psychosocial-impacts-and-priorities-canada>.
5. Myre M, Glenn N. **A guide to post-flooding community-level psychosocial response and recovery in Canada [evidence review]**. Vancouver, BC: National Collaborating Centre for Environmental Health; 2023 Mar 10. Available from: <https://ncceh.ca/documents/evidence-review/guide-post-flooding-community-level-psychosocial-response-and-recovery>.
6. National Collaborating Centre for Environmental Health. **Managing tick-related risks in outdoor environments [topic page]**. Vancouver, BC: NCCEH; 2023 Mar 9. Available from: <https://ncceh.ca/environmental-health-in-canada/health-agency-projects/managing-tick-related-risks-outdoor>.
7. National Collaborating Centre for Environmental Health. **February 2023 Research scan [blog]**. Vancouver, BC: National Collaborating Centre for Environmental Health; 2023 Feb 16. Available from: <https://ncceh.ca/content/blog/february-2023-research-scan-covid-19-sections>.
8. National Collaborating Centre for Environmental Health. **February 2023 e-news**. Vancouver, BC: National Collaborating Centre for Environmental Health; 2023 Feb. Available from: <https://tinyurl.com/3heustme>.
9. Wade T. **Community-based adaptation approaches to sea level rise and health**. Vancouver, BC: National Collaborating Centre for Environmental Health; 2023 Mar 15. Available from: <https://ncceh.ca/documents/community-based-adaptation-approaches-sea-level-rise-and-health>.

Webinars

1. Harper S. **Climate change and health: the IPCC Report and COP27 [webinar]**. Vancouver, BC: National Collaborating Centre for Environmental Health; 2023 Feb 24. Available from: <https://ncceh.ca/content/webinar-recording-climate-change-and-health-ipcc-report-and-cop27>.
2. Myre M, Glenn N. **Public health practices to support psychosocial and mental health response and recovery post-flooding [webinar]**. Vancouver, BC: National Collaborating Centre for Environmental Health; 2023 Mar 30. Available from: <https://ncceh.ca/content/ncceh-environmental-health-seminar-series>

INDIGENOUS ENVIRONMENTAL HEALTH

1. Ponnappalli A, Fisher T, Turner KMT. **Exploring Indigenous community conceptions of parent wellbeing: a qualitative analysis**. Int J Environ Res Public Health. 2023;20(4):3585. Available from: <https://www.mdpi.com/1660-4601/20/4/3585>.
2. Shafiee M, Keshavarz P, Lane G, Pahwa P. **Food Security Status of Indigenous Peoples in Canada According to the 4 Pillars of Food Security: A Scoping Review**. Advances in nutrition (Bethesda, Md). 2023;13(6):2537-58. Available from: <https://doi.org/10.1093/advances/nmac081>.

AGRICULTURAL OPERATIONS

1. Cao TN-D, Mukhtar H, Le L-T, Tran DP-H, Ngo MTT, Pham M-D-T, et al. **Roles of microalgae-based biofertilizer in sustainability of green agriculture and food-water-energy security nexus**. Sci Total Environ. 2023;870:161927. Available from: <https://doi.org/10.1016/j.scitotenv.2023.161927>.
2. Hurlbert M, Bhardwaj A, Akbari M. **Best versus beneficial MP discourses: The significance of a change in discourse managing agricultural water quality in Canada**. J Environ Manage. 2023;332:117289. Available from: <https://doi.org/10.1016/j.jenvman.2023.117289>.
3. Nandini B, Mawale KS, Giridhar P. **Nanomaterials in agriculture for plant health and food safety: a comprehensive review on the current state of agro-nanoscience**. 3 Biotech. 2023;13(3):73. Available from: <https://link.springer.com/article/10.1007/s13205-023-03470-w>.
4. Pinto Jimenez CE, Keestra SM, Tandon P, Pickering AJ, Moodley A, Cumming O, et al. **One Health WASH: an AMR-smart integrative approach to preventing and controlling infection in farming communities**. BMJ Glob Health. 2023;8(3). Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36882219>.
5. Royer H, Yengue JL, Bech N. **Urban agriculture and its biodiversity: What is it and what lives in it?** Agriculture, Ecosystems & Environment. 2023;346. Available from: <https://doi.org/10.1016/j.agee.2023.108342>.

BIOLOGICAL AGENTS

BUILT ENVIRONMENT

1. Ables K. **'15-minute city' planning is on the rise, experts say. Here's what to know.** . 2023 Mar 3. Available from: <https://www.washingtonpost.com/lifestyle/2023/03/03/15-minute-cities-faq/>.
2. 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.** *Annali di igiene : medicina preventiva e di comunita.* 2023;35(2):213-39. Available from: <https://doi.org/10.7416/ai.2022.2534>.
3. Borrell C, Palència L, Mari-Dell'Olmo M, Bartoll X, Gotsens M, Pasarín MI, et al. **A City Surveillance System for Social Health Inequalities: The Case of Barcelona.** *Int J Environ Res Public Health.* 2023;20(4). Available from: <https://doi.org/10.3390%2Fijerph20043536>.
4. Canada Science and Innovation. **Rewilding: helping nature heal itself.** Ottawa, ON: Government of Canada; 2023 [updated Mar 22]; Available from: <https://science.gc.ca/site/science/en/blogs/science-behind-scenes/rewilding-helping-nature-heal-itself>.
5. Figueiredo M, Eloy S, Marques S, Dias L. **Older people perceptions on the built environment: A scoping review.** *Appl Ergon.* 2023;108:1-10. Available from: <https://doi.org/10.1016/j.apergo.2022.103951>.
6. First Nations Health Managers Association. **Knowledge circle - COVID-19 and outdoor safety: Considerations for use of outdoor recreational spaces.** Kanata, ON: FNHMA; 2023 03 09. Available from: <https://www.fnhma.ca/knowledge-circle-resources/covid-19-and-outdoor-safety%3A-considerations-for-use-of-outdoor-recreational-spaces>.
7. Garrett JK, White MP, Elliott LR, Grellier J, Bell S, Bratman GN, et al. **Applying an ecosystem services framework on nature and mental health to recreational blue space visits across 18 countries.** *Sci Rep.* 2023;13(1):2209. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36878999>.
8. Li H, Browning MHEM, Rigolon A, Larson LR, Taff D, Labib SM, et al. **Beyond "bluespace" and "greenspace": A narrative review of possible health benefits from exposure to other natural landscapes.** *Sci Total Environ.* 2023;856:159292. Available from: <https://www.sciencedirect.com/science/article/pii/S0048969722063914>.
9. Lin BB, Chang C-c, Andersson E, Astell-Burt T, Gardner J, Feng X. **Visiting Urban Green Space and Orientation to Nature Is Associated with Better Wellbeing during COVID-19.** *Int J Environ Res Public Health.* 2023;20(4):3559. Available from: <https://www.mdpi.com/1660-4601/20/4/3559>.
10. McCormack GR, Koohsari MJ, Vena JE, Oka K, Nakaya T, Chapman J, et al. **Associations between neighborhood walkability and walking following residential relocation: Findings from Alberta's Tomorrow Project.** *Front Public Health.* 2022;10:1116691. Available from: <https://doi.org/10.3389%2Ffpubh.2022.1116691>.
11. Moxon S. **Chapter 8. 'Rewild My Street'. A model for community-led urban rewilding.** London, UK: Routledge; 2022. Available from: <https://www.taylorfrancis.com/chapters/edit/10.4324/9781003211815-9/rewild-street-si%C3%A2n-moxon>.

12. Nieuwenhuijsen MJ, Dadvand P, Márquez S, Bartoll X, Barboza EP, Cirach M, et al. **The evaluation of the 3-30-300 green space rule and mental health.** *Environ Res.* 2022;215:114387. Available from: <https://www.sciencedirect.com/science/article/pii/S0013935122017145>.
13. Nuccitelli D. **The little-known physical and mental health benefits of urban trees.** 2023 [Feb 28]; Available from: <https://yaleclimateconnections.org/2023/02/the-little-known-physical-and-mental-health-benefits-of-urban-trees/>.
14. Perrotta K. **Public Health Supporting Complete Streets in Hamilton.** Ottawa, ON: Canadian Public Health Association; 2023 Feb 11. Available from: <https://www.cpha.ca/public-health-supporting-complete-streets-hamilton>.
15. Ravensbergen L, Wasfi R, Van Liefferinge M, Ehrlich I, Prince SA, Butler G, et al. **Associations between Light Rail Transit and physical activity: a systematic review.** *Transport Reviews.* 2023;43(2):234-63. Available from: <https://doi.org/10.1080/01441647.2022.2099999>.
16. Tessler M, David FJ, Cunningham SW, Herstoff EM. **Rewilding in Miniature: Suburban Meadows Can Improve Soil Microbial Biodiversity and Soil Health.** *Microb Ecol.* 2023. Available from: <https://doi.org/10.1007/s00248-023-02171-4>.
17. VanVolkenburg H, Beyers R, Nelson C, Vasseur L, Andrade A, Convery I, et al. **Rewilding and human health.** In: Hawkins S, Convery I, Carver S, Beyers R, editors. *Routledge Handbook of Rewilding.* New York, NY: Routledge; 2022. Available from: <https://doi.org/10.4324/9781003097822>.
18. Wicks CL, Barton JL, Andrews L, Orbell S, Sandercock G, Wood CJ. **The Impact of the Coronavirus Pandemic on the Contribution of Local Green Space and Nature Connection to Mental Health.** *Int J Environ Res Public Health.* 2023;20(6):5083. Available from: <https://www.mdpi.com/1660-4601/20/6/5083>.
19. Wiebe C. **Outdoor therapy is good for you.** *Penticton Herald.* 2023 03 08 Mar 8. Available from: https://www.pentictonherald.ca/sports/article_5adb4cd4-be28-11ed-89ad-e30754b8bc63.html.
20. Yong LX, Calautit JK. **A Comprehensive Review on the Integration of Antimicrobial Technologies onto Various Surfaces of the Built Environment.** *Sustainability.* 2023;15(4):3394. Available from: <https://www.mdpi.com/2071-1050/15/4/3394>.

CHEMICAL AGENTS – METALS, GENERAL

General

1. Azfaralariff A, Mat Lazim A, Amran NH, Mukhtar NH, Bakri ND, Azrihan NN, et al. **Mini review of microplastic pollutions and its impact on the environment and human health.** *Waste management & research : the journal of the International Solid Wastes and Public Cleansing Association, ISWA.* 2023:734242X231155395. Available from: <https://doi.org/10.1177/0734242X231155395>.
2. Hall M, Lanphear B, Chevrier J, Hornung R, Green R, Goodman C, et al. **Fluoride exposure and hypothyroidism in a Canadian pregnancy cohort.** *Sci Total Environ.* 2023;869:161149. Available from: <https://fluoridealert.org/wp-content/uploads/1-s2.0-S0048969722082523-main.pdf>.
3. Hardy F, Takser L, Gillet V, Baccarelli AA, Bellenger J-P. **Characterization of childhood exposure to environmental contaminants using stool in a semi-urban middle-class cohort from eastern**

Canada. Environ Res. 2023;222:115367. Available from:

<https://doi.org/10.1016/j.envres.2023.115367>.

4. Tuuri EM, Leterme SC. **How plastic debris and associated chemicals impact the marine food web: A review.** Environmental pollution (Barking, Essex : 1987). 2023;321:121156. Available from: <https://doi.org/10.1016/j.envpol.2023.121156>.

CHEMICAL AGENTS – PESTICIDES

1. Bacon MH, Vandelac L, Gagnon MA, Parent L. **Poisoning Regulation, Research, Health, and the Environment: The Glyphosate-Based Herbicides Case in Canada.** Toxics. 2023;11(2). Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36850995>.

CHEMICAL AGENTS – SHALE GAS

CHILDREN'S ENVIRONMENTAL HEALTH

1. Buczyłowska D, Zhao T, Singh N, Jurczak A, Siry A, Markevych I. **Exposure to greenspace and bluespace and cognitive functioning in children - A systematic review.** Environ Res. 2023;222:115340. Available from: <https://doi.org/10.1016/j.envres.2023.115340>.
2. Koutnik VS, Leonard J, El Rassi LA, Choy MM, Brar J, Glasman JB, et al. **Children's playgrounds contain more microplastics than other areas in urban parks.** Sci Total Environ. 2023;854:158866. Available from: <https://www.sciencedirect.com/science/article/pii/S0048969722059654>.
3. Tabibi Z, Schwebel DC, Juzdani MH. **How does attention deficit hyperactivity disorder affect children's road-crossing? A case-control study.** Traffic Inj Prev. 2023:1-6. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36867075>.

CLIMATE CHANGE

1. Glenn N, Myre M. **Post-flooding community-level psychosocial impacts and priorities in Canada: a preliminary report [evidence review].** Vancouver, BC: National Collaborating Centre for Environmental Health; 2022 Nov 22. Available from: <https://ncceh.ca/documents/evidence-review/post-flooding-community-level-psychosocial-impacts-and-priorities-canada>.
2. Harper S. **Climate change and health: the IPCC Report and COP27 [webinar].** Vancouver, BC: National Collaborating Centre for Environmental Health; 2023 02 24 Feb 24. Available from: <https://ncceh.ca/content/webinar-recording-climate-change-and-health-ipcc-report-and-cop27>.
3. Isler MF, Coates SJ, Boos MD. **Climate change, the cutaneous microbiome and skin disease: implications for a warming world.** Int J Dermatol. 2023;62(3):337-45. Available from: <https://doi.org/10.1111/ijd.16297>.
4. Katal A, Leroyer S, Zou J, Nikiema O, Albetar M, Belair S, et al. **Outdoor heat stress assessment using an integrated multi-scale numerical weather prediction system: A case study of a**

- heatwave in Montreal.** Sci Total Environ. 2023;865. Available from: <https://doi.org/10.1016/j.scitotenv.2022.161276>.
5. Katznelson E, Cascio WE, Bernstein A, Chaudhary R, Al-Roub N, Liu C-L, et al. **Climate change and cardiovascular health: a systematic review.** Journal of the American College of Cardiology (JACC). 2023;81:2332-. Available from: <https://www.ahajournals.org/doi/10.1161/JAHA.122.027847>.
 6. Louis S, Carlson AK, Suresh A, Rim J, Mays M, Ontaneda D, et al. **Impacts of Climate Change and Air Pollution on Neurologic Health, Disease, and Practice: A Scoping Review.** Neurology. 2023;100(10):474-83. Available from: <https://n.neurology.org/content/100/10/474>.
 7. Myre M, Glenn N. **A guide to post-flooding community-level psychosocial response and recovery in Canada [evidence review].** Vancouver, BC: National Collaborating Centre for Environmental Health; 2023 Mar 10. Available from: <https://ncceh.ca/documents/evidence-review/guide-post-flooding-community-level-psychosocial-response-and-recovery>.
 8. Myre M, Glenn N. **Public health practices to support psychosocial and mental health response and recovery post-flooding [webinar].** Vancouver, BC: National Collaborating Centre for Environmental Health; 2023 Mar 30. Available from:
 9. Oliver SL, Santana KV, Ribeiro H. **The Effect of Sunlight Exposure on Vitamin D Status in Countries of Low and High Latitudes: A Systematic Literature Review.** Current nutrition reports. 2023;12(1):1-13. Available from: <https://doi.org/10.1007/s13668-022-00443-y>.
 10. Ratwatte P, Wehling H, Phalkey R, Weston D. **prioritising climate change mitigation behaviours and exploring public health co-benefits: a Delphi study.** Int J Environ Res Public Health. 2023;20(6):5094. Available from: <https://www.mdpi.com/1660-4601/20/6/5094>.
 11. Simpson NP, Williams PA, Mach KJ, Berrang-Ford L, Biesbroek R, Haasnoot M, et al. **Adaptation to compound climate risks: A systematic global stocktake.** iScience. 2023;26(2):105926. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36866045>.
 12. Wade T. **Community-based adaptation approaches to sea level rise and health.** Vancouver, BC: National Collaborating Centre for Environmental Health; 2023 Mar 15. Available from: <https://ncceh.ca/documents/community-based-adaptation-approaches-sea-level-rise-and-health>.

COMMUNICABLE AND INFECTIOUS DISEASES

See **Covid 19 subsections** in this issue and in the [COVID-19 Additional Topics and Guidance](#) section at the end of this issue (e.g., Occupational Guidance, Transit, Transmission)

1. 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://doi.org/10.1186/s12889-023-15313-7>.
2. Norzin T, Ghasbeblou H, Patricio M, Romanova S, Zaghlool A, Tanguay F, et al. **Event-based surveillance: Providing early warning for communicable disease threats.** Can Commun Dis Rep. 2023;49:29-34. Available from: <https://www.canada.ca/en/public-health/services/reports-publications/canada-communicable-disease-report-ccdr/monthly-issue/2023-49/issue-2-3-february-march-2023/event-based-surveillance-early-warning-communicable-diseases.html>.

DRINKING WATER

1. Latchmore T, Hynds PD, Brown RS, McDermott K, Majury A. **Assessing the risk of acute gastrointestinal illness attributable to three enteric pathogens from contaminated private water wells in Ontario.** *Int J Hyg Environ Health.* 2023;248:114077. Available from: <https://doi.org/10.1016/j.ijheh.2022.114077>.
2. Lee D, Denno D, Tarr P, Wu J, Stokdyk JP, Borchardt M, et al. **Study design and methods of the Wells and Enteric disease Transmission (WET) Trial: a randomised controlled trial.** *BMJ Open.* 2023;13(3):e068560. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36863739>.
3. Menon V, Sharma S, Gupta S, Ghosal A, Nadda AK, Jose R, et al. **Prevalence and implications of microplastics in potable water system: An update.** *Chemosphere.* 2023;317. Available from: <https://doi.org/10.1016/j.chemosphere.2023.137848>.
4. Muhib MI, Uddin MK, Rahman MM, Malafaia G. **Occurrence of microplastics in tap and bottled water, and food packaging: A narrative review on current knowledge.** *Sci Total Environ.* 2023;865:161274. Available from: <https://doi.org/10.3390/ijerph19095283>.
5. Tsatsou A, Frantzeskaki N, Malamis S. **Nature-based solutions for circular urban water systems: A scoping literature review and a proposal for urban design and planning.** *Journal of Cleaner Production.* 2023;394. Available from: <https://doi.org/10.1016/j.jclepro.2023.136325>.

EMERGENCY PREPAREDNESS

1. Horton D, Spigelmyer P, Zoucha R, Rebmann T. **Disaster Preparedness in K-12 Schools: An Integrative Review.** *The Journal of school health.* 2023. Available from: <https://doi.org/10.1111/josh.13319>.
2. Karabanow J, Wu H, Doll K, Leviten-Reid C, Hughes J. **Promoting Emergency Response for Homeless Service Agencies: Field-Based Recommendations from Two Municipalities in Nova Scotia, Canada.** *Natural hazards review.* 2023;24(2). Available from: <https://ascelibrary.org/doi/abs/10.1061/NHREFO.NHENG-1498>.
3. Sapkota A, Kotanko P. **Climate change-fuelled natural disasters and chronic kidney disease: a call for action.** *Nature reviews Nephrology.* 2023;19(3):141-2. Available from: <https://www.nature.com/articles/s41581-023-00682-4>.
4. Winters TA, Cassatt DR, Harrison-Peters JR, Hollingsworth BA, Rios CI, Satyamitra MM, et al. **Considerations of Medical Preparedness to Assess and Treat Various Populations During a Radiation Public Health Emergency.** *Radiat Res.* 2023;199(3):301-18. Available from: <https://doi.org/10.1667/rade-22-00148.1>.

ENVIRONMENTAL HEALTH SURVEILLANCE

1. Barros B, Oliveira M, Morais S. **Biomonitoring of firefighting forces: a review on biomarkers of exposure to health-relevant pollutants released from fires.** *J Toxicol Environ Health B Crit Rev.* 2023;26(3):127-71. Available from: <https://doi.org/10.1080/10937404.2023.2172119>.

- Gibson JC, Marro L, Brandow D, Remedios L, Fisher M, Borghese MM, et al. **Biomonitoring of DEET and DCBA in Canadian children following typical protective insect repellent use.** *Int J Hyg Environ Health.* 2023;248:114093. Available from: <https://doi.org/10.1016/j.ijheh.2022.114093>.

ENVIRONMENTAL PLANNING

- Dunsky Energy + Climate Advisors. **Electric School Buses. The benefits to British Columbians and options for accelerating the transition.** Vancouver, BC: Prepared for the Pembina Institute; 2022 Jun. Available from: <https://www.pembina.org/pub/electric-school-buses#:~:text=Electric%20School%20BusesThe%20benefits,options%20for%20accelerating%20the%20transition&text=In%20the%20CleanBC%20Roadmap%20to,duty%20vehicles%20in%20the%20province>.

FOOD

Food Safety

- Abedi-Firoozjah R, Salim SA, Hasanvand S, Assadpour E, Azizi-Lalabadi M, Prieto MA, et al. **Application of smart packaging for seafood: A comprehensive review.** *Compr Rev Food Sci Food Saf.* 2023;22(2):1438-61. Available from: <https://doi.org/10.1111/1541-4337.13117>.
- Anedda E, Farrell ML, Morris D, Burgess CM. **Evaluating the impact of heavy metals on antimicrobial resistance in the primary food production environment: A scoping review.** *Environmental pollution (Barking, Essex : 1987).* 2023;320:121035. Available from: <https://doi.org/10.1016/j.envpol.2023.121035>.
- Chen B, Zhang M, Chen H, Mujumdar AS, Guo Z. **Progress in smart labels for rapid quality detection of fruit and vegetables: A review.** *Postharvest Biology & Technology.* 2023;198:. Available from: <https://doi.org/10.1016/j.postharvbio.2023.112261>.
- Chen C, Feng Y, Chen Z, Xia Y, Zhao X, Wang J, et al. **SARS-CoV-2 cold-chain transmission: Characteristics, risks, and strategies.** *J Med Virol.* 2022;94(8):3540-7. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/35355277>.
- Food and Agriculture Organization (FAO), World Health Organization (WHO). **Proposed draft guidance on the management of biological foodborne outbreaks.** FAO, WHO; 2023. Available from: <https://www.fao.org/fao-who-codexalimentarius/sh-proxy/en/?lnk=1&url=https%253A%252F%252Fworkspace.fao.org%252Fsites%252Fcodex%252FMeetings%252FCX-712-52%252FCRD%252FCRD02e.pdf>.
- Glasbrenner DC, Choi YW, Middleton JK. **SARS-CoV-2 persistence on common food covering materials: plastic wrap, fruit wax, and cardboard takeout containers.** *J Appl Microbiol.* 2023;134(2). Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36657120>.
- Li X, Liu Y, Yin Y, Wang P, Su X. **Occurrence of some legacy and emerging contaminants in feed and food and their ranking priorities for human exposure.** *Chemosphere.* 2023;321:. Available from: <https://doi.org/10.1016/j.chemosphere.2023.138117>.

8. Ma L, Yi J, Wisuthiphaet N, Earles M, Nitin N. **Accelerating the Detection of Bacteria in Food Using Artificial Intelligence and Optical Imaging.** *Appl Environ Microbiol.* 2023;89(1):e01828-22. Available from: <https://journals.asm.org/doi/abs/10.1128/aem.01828-22>.
9. Melo J, Quintas C. **Minimally processed fruits as vehicles for foodborne pathogens.** *AIMS Microbiol.* 2023;9(1):1-19. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36891538>.
10. Sadanandan S, V. S M, Ramkumar K, Pillai NP, P A, P. J S, et al. **Biorecognition elements appended gold nanoparticle biosensors for the detection of food-borne pathogens - A review.** *Food Control.* 2023;148. Available from: <https://doi.org/10.1016/j.foodcont.2022.109510>.
11. Shahmohamadloo RS, Bhavsar SP, Almirall XO, Marklevitz SAC, Rudman SM, Sibley PK. **Cyanotoxins accumulate in Lake St. Clair fish yet their fillets are safe to eat.** *Sci Total Environ.* 2023:162381. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36870491>.
12. Shnirring L. **More Salmonella cases reported in outbreak tied to pet bearded dragons.** Minneapolis, MN: Center for Infectious Disease Research & Policy (CIDRAP), University of Minnesota; 2023 Jan 23. Available from: <https://www.cidrap.umn.edu/salmonella/more-salmonella-cases-reported-outbreak-tied-pet-bearded-dragons>.
13. Sindhu S, Manickavasagan A. **Nondestructive testing methods for pesticide residue in food commodities: A review.** *Compr Rev Food Sci Food Saf.* 2023;22(2):1226-56. Available from: <https://doi.org/10.1111/1541-4337.13109>.
14. Suraj N. **The role of food safety in the insect protein sector.** *Food Safety Magazine.* 2023. Available from: https://www.food-safety.com/articles/8321-the-role-of-food-safety-in-the-insect-protein-sector?oly_enc_id=5390A5397667E0Z.
15. Tumu K, Vorst K, Curtzwiler G. **Endocrine modulating chemicals in food packaging: A review of phthalates and bisphenols.** *Compr Rev Food Sci Food Saf.* 2023;22(2):1337-59. Available from: <https://doi.org/10.1111/1541-4337.13113>.
16. Wang C, Yan R, Li X, Sang S, McClements DJ, Chen L, et al. **Development of emulsion-based edible inks for 3D printing applications: Pickering emulsion gels.** *Food Hydrocolloids.* 2023;138. Available from: <https://doi.org/10.1016/j.foodhyd.2023.108482>.
17. Wasiewska LA, Juska VB, Seymour I, Burgess CM, Duffy G, O'Riordan A. **Electrochemical nucleic acid-based sensors for detection of Escherichia coli and Shiga toxin-producing E. coli-Review of the recent developments.** *Compr Rev Food Sci Food Saf.* 2023. Available from: <https://doi.org/10.1111/1541-4337.13132>.
18. World Health Organization. **WHO global strategy for food safety 2022-2030: towards stronger food safety systems and global cooperation.** Geneva, Switzerland: WHO; 2022 Oct. Available from: <https://www.who.int/publications/i/item/9789240057685>.
19. Yan F, Wang L, Zhao L, Wang C, Lu Q, Liu R. **Acrylamide in food: Occurrence, metabolism, molecular toxicity mechanism and detoxification by phytochemicals.** *Food and chemical toxicology: an international journal published for the British Industrial Biological Research Association.* 2023:113696. Available from: <https://doi.org/10.1016/j.fct.2023.113696>.
20. Zhang Y, Zhang Y. **A comprehensive review of furan in foods: From dietary exposures and in vivo metabolism to mitigation measures.** *Compr Rev Food Sci Food Saf.* 2023;22(2):809-41. Available from: <https://doi.org/10.1111/1541-4337.13092>.

Security

1. Adedeji AA, Vijayakumar PP. **The propensity of fomite spread of SARS-CoV-2 virus through produce supply chain.** Bull Natl Res Cent. 2022;46(1):245. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36156873>.
2. Dai H, Tang H, Sun W, Deng S, Han J. **It is time to acknowledge coronavirus transmission via frozen and chilled foods: Undeniable evidence from China and lessons for the world.** Sci Total Environ. 2023;868:161388. Available from: <https://doi.org/10.1016%2Fj.scitotenv.2023.161388>.
3. Foley DA, Sikazwe CT, Minney-Smith CA, Ernst T, Moore HC, Nicol MP, et al. **An Unusual Resurgence of Human Metapneumovirus in Western Australia Following the Reduction of Non-Pharmaceutical Interventions to Prevent SARS-CoV-2 Transmission.** Viruses. 2022;14(10). Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36298690>.

GENERAL

1. Fok N. **Relevant research article summaries.** Environ Health Rev. 2022;65(4):123-5. Available from: <https://pubs.ciphi.ca/doi/abs/10.5864/d2022-021>.
2. Hoogveen D, Atleo CG, Patrick L, Kennedy AM, Leduc M, Parkes MW, et al. **On the possibility of decolonising planetary health: exploring new geographies for collaboration.** The Lancet Planetary Health. 2023;7(2):e179-e83. Available from: [https://doi.org/10.1016/S2542-5196\(22\)00334-5](https://doi.org/10.1016/S2542-5196(22)00334-5).
3. Ismaiel M, Gouda M, Li Y, Chen Y. **Airtightness evaluation of Canadian dwellings and influencing factors based on measured data and predictive models.** Indoor + built environment : the journal of the International Society of the Built Environment. 2023;32(3):553-73. Available from: <https://doi.org/10.1177/1420326X221121519>.
4. Luo Y, Ruggiano N, Bolt D, Witt J-P, Anderson M, Gray J, et al. **Community Asset Mapping in Public Health: A Review of Applications and Approaches.** Social work in public health. 2023;38(3):171-81. Available from: <https://doi.org/10.1080/19371918.2022.2114568>.
5. Policy Horizons Canada. **Biodigital Today and Tomorrow.** Ottawa, ON: Government of Canada; 2022 May 31. Available from: <https://horizons.gc.ca/en/2022/05/31/biodigital-today-and-tomorrow/>.
6. Policy Horizons Canada. **Exploring change in social connection.** Ottawa, ON: Policy Horizons; 2023 Feb. Available from: <https://horizons.gc.ca/en/2023/02/22/exploring-change-in-social-connection/>.
7. Rahmillah FI, Tariq A, King M, Oviedo-Trespalacios O. **Is distraction on the road associated with maladaptive mobile phone use? A systematic review.** Accid Anal Prev. 2023;181. Available from: <https://doi.org/10.1016/j.aap.2022.106900>.

Health Policy

1. Xie W, Chapman A, Yan T. **Do Environmental Regulations Facilitate a Low-Carbon Transformation in China's Resource-Based Cities?** Int J Environ Res Public Health. 2023;20(5):4502. Available from: <https://www.mdpi.com/1660-4601/20/5/4502>.

HEALTH EQUITY

1. Hess J. **Heat and health inequity: acting on determinants of health to promote heat justice.** Nature reviews Nephrology. 2023;19(3):143-4. Available from: <https://doi.org/10.1038/s41581-023-00679-z>.

HEALTH IMPACT ASSESSMENT

INDOOR AIR

1. Canadian Centre for Occupational Health and Safety. **Coronavirus (COVID-19) - Tips - Indoor Ventilation: Guidance During the COVID-19 Pandemic.** Toronto, ON: CCOHS; 2023 02 17 Feb 17. Available from: <https://www.ccohs.ca/covid19/indoor-ventilation/>.
2. Dewika M, Markandan K, Irfan NA, Mohd Abdah MAA, Ruwaida JN, Sara YY, et al. **Review of microplastics in the indoor environment: Distribution, human exposure and potential health impacts.** Chemosphere. 2023:138270. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36878370>.
3. Eykelbosh A, Nicol A-M. **Air quality sensor lending libraries: Bringing home public health.** Environ Health Rev. 2022;65(4):109-13. Available from: <https://pubs.ciphi.ca/doi/abs/10.5864/d2022-023>.
4. Paddy EN, Afolabi OOD, Sohail M. **Toilet plume bioaerosols in health care and hospitality settings: A systematic review.** Am J Infect Control. 2023;51(3):324-33. Available from: <https://doi.org/10.1016/j.ajic.2022.07.006>.
5. Yang J, Fan X, Zhang H, Zheng W, Ye T. **A review on characteristics and mitigation strategies of indoor air quality in underground subway stations.** Sci Total Environ. 2023;869:161781. Available from: <https://doi.org/10.1016/j.scitotenv.2023.161781>.
6. Yang S, Wang L, Raftery P, Ivanovich M, Taber C, Bahnfleth WP, et al. **Comparing airborne infectious aerosol exposures in sparsely occupied large spaces utilizing large-diameter ceiling fans.** Build Environ. 2023;231. Available from: <https://doi.org/10.1016/j.buildenv.2023.110022>.

NUISANCE CONTROL

OUTDOOR AIR

1. Coker ES, Saha Turna N, Schouwenburg M, Jalil A, Bradshaw C, Kuo M, et al. **Characterization of the short-term temporal variability of road dust chemical mixtures and meteorological profiles in a near-road urban site in British Columbia.** J Air Waste Manag Assoc. 2023. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36880994>.
2. Cory-Slechta DA, Sobolewski M. **Neurotoxic effects of air pollution: an urgent public health concern.** Nat Rev Neurosci. 2023;24(3):129-30. Available from: <https://doi.org/10.1038/s41583-022-00672-8>.

3. Garcia E, Johnston J, McConnell R, Palinkas L, Eckel SP. **California's early transition to electric vehicles: Observed health and air quality co-benefits.** *Sci Total Environ.* 2023;867:161761. Available from: <https://doi.org/10.1016/j.scitotenv.2023.161761>.
4. Kulick ER, Kaufman JD, Sack C. **Ambient Air Pollution and Stroke: An Updated Review.** *Stroke.* 2023;54(3):882-93. Available from: <https://doi.org/10.1161/STROKEAHA.122.035498>.
5. Lwin KS, Tobias A, Chua PL, Yuan L, Thawonmas R, Ith S, et al. **Effects of Desert Dust and Sandstorms on Human Health: A Scoping Review.** *Geohealth.* 2023;7(3):e2022GH000728. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36874170>.
6. Millen AE, Dighe S, Kordas K, Aminigo BZ, Zafron ML, Mu L. **Air Pollution and Chronic Eye Disease in Adults: A Scoping Review.** *Ophthalmic Epidemiol.* 2023:1-10. Available from: <https://doi.org/10.1080/09286586.2023.2183513>.
7. Pacifico LR, Pizzolante A, Guarino A, Iannone A, Esposito M, Albanese S. **Wildfires as a Source of Potentially Toxic Elements (PTEs) in Soil: A Case Study from Campania Region (Italy).** *Int J Environ Res Public Health.* 2023;20(5):4513. Available from: <https://www.mdpi.com/1660-4601/20/5/4513>.
8. Villeneuve PJ, Huynh D, Lavigne É, Colman I, Anisman H, Peters C, et al. **Daily changes in ambient air pollution concentrations and temperature and suicide mortality in Canada: Findings from a national time-stratified case-crossover study.** *Environ Res.* 2023;223:115477. Available from: <https://www.sciencedirect.com/science/article/pii/S0013935123002694>.
9. Xu R, Zhong Y, Li R, Li Y, Zhong Z, Liu T, et al. **Association between exposure to ambient air pollution and semen quality: A systematic review and meta-analysis.** *Sci Total Environ.* 2023;870:161892. Available from: <https://doi.org/10.1016/j.scitotenv.2023.161892>.
10. Yu H, Zahidi I. **Environmental hazards posed by mine dust, and monitoring method of mine dust pollution using remote sensing technologies: An overview.** *Sci Total Environ.* 2023;864:161135. Available from: <https://doi.org/10.1016/j.scitotenv.2022.161135>.

PERSONAL SERVICE ESTABLISHMENTS

PEST CONTROL

PHYSICAL AGENTS

1. Cantuaria ML, Pedersen ER, Poulsen AH, Raaschou-Nielsen O, Hvidtfeldt UA, Levin G, et al. **Transportation Noise and Risk of Tinnitus: A Nationwide Cohort Study from Denmark.** *Environ Health Perspect.* 2023;131(2):027001. Available from: <https://ehp.niehs.nih.gov/doi/abs/10.1289/EHP11248>.
2. Mori K, Rock M, McCormack G, Liccioli S, Giunchi D, Marceau D, et al. **Fecal contamination of urban parks by domestic dogs and tragedy of the commons.** *Sci Rep.* 2023;13(1):3462. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36859468>.

RADIATION

1. Ben Ishai P, Davis D, Taylor H, Birnbaum L. **Problems in evaluating the health impacts of radio frequency radiation.** Environ Res. 2023;115038. Available from: <https://www.sciencedirect.com/science/article/pii/S0013935122023659>.
2. Chen J. **A Review of Radon Exposure in Non-uranium Mines-Estimation of Potential Radon Exposure in Canadian Mines.** Health Phys. 2023;124(4):244-56. Available from: <https://doi.org/10.1097/hp.0000000000001661>.

RECREATIONAL AND SURFACE WATER

1. Hossein M, Asha R, Bakari R, Islam NF, Jiang G, Sarma H. **Exploring eco-friendly approaches for mitigating pharmaceutical and personal care products in aquatic ecosystems: A sustainability assessment.** Chemosphere. 2023;316:137715. Available from: <https://doi.org/10.1016/j.chemosphere.2022.137715>.
2. Majury A, Murphy A, Mayer B, Singh R, Azad M, Kim JH, et al. **Two Cases of Legionnaires' disease following exposure to a hot tub at a private residence – Ontario, 2021.** Environ Health Rev. 2022;65(4):119-22. Available from: <https://pubs.ciphi.ca/doi/abs/10.5864/d2022-025>.
3. Zhang Y, Whalen JK, Cai C, Shan K, Zhou H. **Harmful cyanobacteria-diatom/dinoflagellate blooms and their cyanotoxins in freshwaters: A nonnegligible chronic health and ecological hazard.** Water Res. 2023;233:119807. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36871382>.

RISK ASSESSMENT, COMMUNICATION

SENIORS' ENVIRONMENTAL HEALTH

1. Cole E, Donnan KJ, Simpson AJ, Garrett AT. **Short-term heat acclimation protocols for an aging population: Systematic review.** PLoS ONE. 2023;18(3):e0282038. Available from: <https://doi.org/10.1371/journal.pone.0282038>.
2. Granet J, Peyrusqué E, Ruiz F, Buckinx F, Abdelkader LB, Dang-Vu TT, et al. **Web-Based Physical Activity Interventions Are Feasible and Beneficial Solutions to Prevent Physical and Mental Health Declines in Community-Dwelling Older Adults During Isolation Periods.** The journals of gerontology Series A, Biological sciences and medical sciences. 2023;78(3):535-44. Available from: <https://doi.org/10.1093/gerona/glac127>.
3. Hashmi AZ, Christy J, Saxena S, Factora R. **An age-friendly population health dashboard geolocating by clinical and social determinant needs.** Health Serv Res. 2023 Feb:44+. Available from: <https://link.gale.com/apps/doc/A738198522/HRCA?u=ubcolumbia&sid=bookmark-HRCA&xid=c21c499b>.
4. Javdan M, Ghasemaghaei M, Abouzahra M. **Psychological barriers of using wearable devices by seniors: A mixed-methods study.** Computers in Human Behavior. 2023;141. Available from: <https://doi.org/10.1016/j.chb.2022.107615>.

5. Khan SS, Gu T, Spinelli L, Wang RH. **Sensor-based assessment of social isolation in community-dwelling older adults: a scoping review.** Biomed Eng Online. 2023;22(1):18. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36849963>.
6. Newbold KB, Valaitis R, Phillips S, Alvarez E, Neil-Sztramko S, Sihota D, et al. **Enhancing Physical and Community MoBility in OLDEr Adults with Health Inequities Using CommuNity Co-Design (EMBOLDEN): Results of an Environmental Scan.** Can Geriatr J. 2023;26(1):23-30. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36865406>.

TOBACCO, CANNABIS, VAPING

WASTE

1. Li X, Zhang S, Sherchan S, Orive G, Lertxundi U, Haramoto E, et al. **Correlation between SARS-CoV-2 RNA concentration in wastewater and COVID-19 cases in community: A systematic review and meta-analysis.** J Hazard Mater. 2023;441:129848. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36067562>.
2. Maal-Bared R, Qiu Y, Li Q, Gao T, Hrudehy SE, Bhavanam S, et al. **Does normalization of SARS-CoV-2 concentrations by Pepper Mild Mottle Virus improve correlations and lead time between wastewater surveillance and clinical data in Alberta (Canada): comparing twelve SARS-CoV-2 normalization approaches.** Sci Total Environ. 2023;856(Pt 1):158964. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36167131>.
3. Thompson JT, Chen B, Bowden JA, Townsend TG. **Per- and Polyfluoroalkyl Substances in Toilet Paper and the Impact on Wastewater Systems.** Environ Sci Technol Lett. 2023. Available from: <https://doi.org/10.1021/acs.estlett.3c00094>.
4. Warren-Vega WM, Campos-Rodríguez A, Zárata-Guzmán AI, Romero-Cano LA. **A Current Review of Water Pollutants in American Continent: Trends and Perspectives in Detection, Health Risks, and Treatment Technologies.** Int J Environ Res Public Health. 2023;20(5):4499. Available from: <https://www.mdpi.com/1660-4601/20/5/4499>.

ZOONOSES

1. Acheson ES, Viard F, Buchanan T, Nituch L, Leighton PA. **Comparing Control Intervention Scenarios for Raccoon Rabies in Southern Ontario between 2015 and 2025.** Viruses. 2023;15(2). Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36851742>.
2. Agüero M, Monne I, Sánchez A, Zecchin B, Fusaro A, Ruano MJ, et al. **Highly pathogenic avian influenza A(H5N1) virus infection in farmed minks, Spain, October 2022.** Eurosurveillance. 2023;28(3):2300001. Available from: <https://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2023.28.3.2300001>.
3. Albrecht L, Kaufeld KA. **Investigating the impact of environmental factors on West Nile virus human case prediction in Ontario, Canada.** Front Public Health. 2023;11:1100543. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36875397>.
4. Albrecht L, Kaufeld KA. **Investigating the impact of environmental factors on West Nile virus human case prediction in Ontario, Canada.** Front Public Health. 2023;11:1100543. Available from: <https://doi.org/10.3389/fpubh.2023.1100543>.

5. Alkie TN, Cox S, Embury-Hyatt C, Stevens B, Pople N, Pybus MJ, et al. **Characterization of neurotropic HPAI H5N1 viruses with novel genome constellations and mammalian adaptive mutations in free-living mesocarnivores in Canada.** *Emerg Microbes Infect.* 2023;2186608. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36880345>.
6. Dillinger K. **New York City rats can catch the coronavirus that causes Covid-19, study finds.** *CNN News.* 2023 Mar 9. Available from: <https://edition.cnn.com/2023/03/09/health/covid-new-york-rats/index.html>.
7. Elmieh N. **The impacts of climate and land use change on tick-related risks [evidence review].** Vancouver, BC: National Collaborating Centre for Environmental Health; 2022 Nov 23. Available from: <https://ncceh.ca/documents/evidence-review/impacts-climate-and-land-use-change-tick-related-risks>.
8. Elmieh N. **Review of environmental management strategies to reduce tick populations [evidence review].** Vancouver, BC: National Collaborating Centre for Environmental Health; 2023 Mar 9. Available from: <https://ncceh.ca/documents/evidence-review/review-environmental-management-strategies-reduce-tick-populations>
9. Garcia-Diez J, Saraiva S, Moura D, Grispoli L, Cenci-Goga BT, Saraiva C. **The Importance of the Slaughterhouse in Surveilling Animal and Public Health: A Systematic Review.** *Vet Sci.* 2023;10(2). Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36851472>.
10. Giunti G, Becker N, Benelli G. **Invasive mosquito vectors in Europe: From bioecology to surveillance and management.** *Acta Trop.* 2023;239. Available from: <https://doi.org/10.1016/j.actatropica.2023.106832>.
11. Klestova Z. **Possible spread of SARS-CoV-2 in domestic and wild animals and body temperature role.** *Virus Res.* 2023;327:199066. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36754290>.
12. Mojahed N, Mohammadkhani MA, Mohamadkhani A. **Climate Crises and Developing Vector-Borne Diseases: A Narrative Review.** *Iran J Public Health.* 2022;51(12):2664-73. Available from: <https://doi.org/10.18502/ijph.v51i12.11457>.
13. National Collaborating Centre for Environmental Health. **Managing tick-related risks in outdoor environments [topic page].** Vancouver, BC: NCCEH; 2023 Mar 9. Available from: <https://ncceh.ca/environmental-health-in-canada/health-agency-projects/managing-tick-related-risks-outdoor>
14. Siedner MJ, Trinidad J, Berto CG, Brown CM, Madoff LC, Lee EH, et al. **Mpox in Young Woman with No Epidemiologic Risk Factors, Massachusetts, USA.** *Emerging Infect Dis.* 2023;29(4). Available from: https://wwwnc.cdc.gov/eid/article/29/4/22-1921_article?utm_source=Institut+national+de+sant%C3%A9+publique+du+Qu%C3%A9bec&utm_campaign=1d6d775406-ZOONOSES_2023_02_21&utm_medium=email&utm_term=0_b5d9f3a57e-1d6d775406-446203185.
15. US Centers for Disease Control and Prevention. **Science Brief: Detection and Transmission of Mpox (Formerly Monkeypox) Virus During the 2022 Clade IIb Outbreak.** Atlanta, GA: US CDC; 2023 Feb 2. Available from: https://www.cdc.gov/poxvirus/monkeypox/about/science-behind-transmission.html?utm_source=Institut+national+de+sant%C3%A9+publique+du+Qu%C3%A9bec

[c&utm_campaign=1d6d775406-ZOONOSSES_2023_02_21&utm_medium=email&utm_term=0_b5d9f3a57e-1d6d775406-446203185.](#)

16. Vora NM, Hannah L, Walzer C, Vale MM, Lieberman S, Emerson A, et al. **Interventions to Reduce Risk for Pathogen Spillover and Early Disease Spread to Prevent Outbreaks, Epidemics, and Pandemics.** *Emerging Infect Dis.* 2023. Available from: [https://wwwnc.cdc.gov/eid/article/29/3/22-1079_article?utm_source=Institut+national+de+sant%C3%A9+publique+du+Qu%C3%A9bec&utm_campaign=1d6d775406-ZOONOSSES_2023_02_21&utm_medium=email&utm_term=0_b5d9f3a57e-1d6d775406-446203185.](https://wwwnc.cdc.gov/eid/article/29/3/22-1079_article?utm_source=Institut+national+de+sant%C3%A9+publique+du+Qu%C3%A9bec&utm_campaign=1d6d775406-ZOONOSSES_2023_02_21&utm_medium=email&utm_term=0_b5d9f3a57e-1d6d775406-446203185)
17. Wang Y, Lench J, Kohler D, DeLiberto TJ, Tang CY, Li T, et al. **SARS-CoV-2 Exposure in Norway Rats (*Rattus norvegicus*) from New York City.** *mBio.*0(0):e03621-22. Available from: [https://journals.asm.org/doi/abs/10.1128/mbio.03621-22.](https://journals.asm.org/doi/abs/10.1128/mbio.03621-22)

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COVID-19 ADDITIONAL TOPICS & GUIDANCE



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- [SURVIVAL TIME](#)
- [TRANSIT, TRANSPORTATION](#)
- [TRANSMISSION](#)

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

Cleaning

1. Almeida CF, Purcell DFJ, Godfrey DI, McAuley JL. **The Efficacy of Common Household Cleaning Agents for SARS-CoV-2 Infection Control.** *Viruses.* 2022;14(4). Available from: <https://www.ncbi.nlm.nih.gov/pubmed/35458445>.
2. Mahmudiono T, Ramaiah P, Maleki H, Doewes RI, Shalaby MN, Alsaikhan F, et al. **Evaluation of the impact of different disinfectants on new coronavirus and human health.** *Rev Environ Health.* 2022. Available from: <https://doi.org/10.1515/reveh-2022-0051>.
3. Marumure J, Makuvara Z, Alufasi R, Chapungu L, Gufe C. **Effectiveness of hand sanitizers in the prevention of COVID-19 and related public health concerns: A review.** *Cogent Public Health.* 2022;9(1):2060904. Available from: <https://doi.org/10.1080/27707571.2022.2060904>.
4. Oliveira SV, Neves FDD, Santos DCD, Monteiro MBB, Spanghero MS, Motta BN, et al. **The effectiveness of phototherapy for surface decontamination against SARS-Cov-2. A systematic review.** *J Biophotonics.* 2022:e202200306. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36560919>.
5. Richter WR, Sunderman MM, Mera TO, O'Brien KA, Morgan K, Streams S. **Evaluation of environmental conditions as a decontamination approach for SARS-CoV-2 when applied to common library, archive and museum-related materials.** *J Appl Microbiol.* 2022;132(4):3405-15. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/35094472>.

PPE, Face Masks, Distancing, etc

1. Jefferson T, Dooley L, Ferroni E, Al-Ansary LA, van Driel ML, Bawazeer GA, et al. **Physical interventions to interrupt or reduce the spread of respiratory viruses.** *Cochrane Database Syst Rev.* 2023(1). Available from: <https://doi.org/10.1002/14651858.CD006207.pub6>.
2. Nascimento AMD. **SMASK-Smart Mask with colorimetric biosensor for SARS-CoV-2 contamination and humidity** 2022. Available from: <https://recipp.ipp.pt/handle/10400.22/21562>.
3. Thompson D. **Why Are We Still Arguing About Masks? All this time later, their utility is in doubt.** *The Washington Post.* 2023 Mar 3. Available from: <https://www.theatlantic.com/newsletters/archive/2023/03/covid-lab-leak-mask-mandates-science-media-information/673263/>.

HOMELESS, VULNERABLE POPULATIONS, HOUSING

MENTAL HEALTH

1. Sun Y, Wu Y, Fan S, Dal Santo T, Li L, Jiang X, et al. **Comparison of mental health symptoms before and during the covid-19 pandemic: evidence from a systematic review and meta-analysis of 134 cohorts.** *BMJ.* 2023;380:e074224. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36889797>.

MULTI-UNIT BUILDINGS

OCCUPATIONAL GUIDANCE

Occupational

PUBLIC FACILITIES

Transportation (see separate category, 'Transit, Transportation')

SURVIVAL TIME

1. Dallner M, Harlow J, Nasheri N. **Human Coronaviruses Do Not Transfer Efficiently between Surfaces in the Absence of Organic Materials.** *Viruses.* 2021;13(7). Available from: <https://doi.org/10.3390/v13071352>.

TRANSIT, TRANSPORTATION

1. Zebehazy KT, Rosenblum LP, Thompson KM. **The Impact of COVID-19 on Transportation of Adults With Visual Impairments.** *Journal of Visual Impairment & Blindness.* 2022;116(6):794-805. Available from: <https://journals.sagepub.com/doi/abs/10.1177/0145482X221143143>.

TRANSMISSION

1. Behzadinasab S, Chin AWH, Hosseini M, Poon LLM, Ducker WA. **SARS-CoV-2 virus transfers to skin through contact with contaminated solids.** *Sci Rep.* 2021;11(1):22868. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/34819522>.
2. Boucher E, Cao C, D'Mello S, Duarte N, Donnici C, Duarte N, et al. **Occupation and SARS-CoV-2 seroprevalence studies: a systematic review.** *BMJ Open.* 2023;13(2):e063771. Available from: <https://bmjopen.bmj.com/content/bmjopen/13/2/e063771.full.pdf>.
3. Elhamamsy S, DeVone F, Bayer T, Halladay C, Cadieux M, McConeghy K, et al. **Can we use temperature measurements to identify pre-symptomatic SARS-CoV-2 infection in nursing home residents?** *J Am Geriatr Soc.* 2022;70(11):3239-44. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/35924551>.
4. Geng Y, Wang Y. **Stability and transmissibility of SARS-CoV-2 in the environment.** *J Med Virol.* 2023;95(1):e28103. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36039831>.
5. Sheraz M, Mir KA, Anus A, Le VCT, Kim S, Nguyen VQ, et al. **SARS-CoV-2 airborne transmission: a review of risk factors and possible preventative measures using air purifiers.** *Environ Sci Process Impacts.* 2022;24(12):2191-216. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36278886>.
6. Thornton GM, Kroeker E, Fleck BA, Zhong L, Hartling L. **The Impact of Heating, Ventilation, and Air-Conditioning Design Features on the Transmission of Viruses, Including SARS-CoV-2: Overview**

of Reviews. Interact J Med Res. 2022;11(2):e37232. Available from:
<https://www.ncbi.nlm.nih.gov/pubmed/36343208>.

7. Zhang Z, Li X, Lyu K, Zhao X, Zhang F, Liu D, et al. **Exploring the Transmission Path, Influencing Factors and Risk of Aerosol Transmission of SARS-CoV-2 at Xi'an Xianyang International Airport.** Int J Environ Res Public Health. 2023;20(1). Available from:
<https://www.ncbi.nlm.nih.gov/pubmed/36613187>.

Outbreaks (selected)

1. Raja AI, van Veldhoven K, Ewuzie A, Frost G, Sandys V, Atkinson B, et al. **Investigation of a SARS-CoV-2 Outbreak at an Automotive Manufacturing Site in England.** Int J Environ Res Public Health. 2022;19(11). Available from: <https://www.ncbi.nlm.nih.gov/pubmed/35681985>.

Variants (selected)

1. Silva S, Kohl A, Pena L, Pardee K. **Recent insights into SARS-CoV-2 omicron variant.** Rev Med Virol. 2023;33(1):e2373. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/35662313>.

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