

ENVIRONMENTAL HEALTH RESEARCH SCAN

WITH COVID-19 SECTIONS

VOL 5 (12) DECEMBER 2022



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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 This research scan is not peer reviewed; it does not cover all research, news, and information, and NCCEH is not responsible for the accuracy of the content from media or databases.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

Overview of Canadian communities exposed to sea level rise [evidence review] Tracey Wade in partnership with the National Collaborating Centre for Environmental Health

“This report provides an overview of Canadian communities most at risk from sea level rise for public health and climate adaptation practitioners. This report is part 1 of 4 from the NCCEH/CLIMAtlantic “Sea level rise and public health” project. [Please see the full project description and companion reports here.](#)”



Health risks associated with sea level rise [evidence review]

Tracey Wade in partnership with the National Collaborating Centre for Environmental Health

“This information is intended to assist public health professionals and others involved in climate change adaptation to better incorporate health considerations into adaptation planning for affected coastal communities” This report is part 2 of 4, see series above.



Sea level rise and public health [topic page]

National Collaborating Centre for Environmental Health

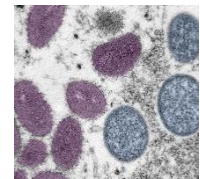
“Greater understanding of the public health impacts of sea level rise in Canada, and how the impacts are addressed in current community-based tools such as local Climate Change Adaptation Plans (CCAPs), could help inform future action to protect public health.”



Mpox in personal service establishments: Low risk, but know the signs [blog]

Leah Rosenkrantz, Knowledge Translation Scientist, National Collaborating Centre for Environmental Health

“This document provides an overview of mpox and its transmission, and outlines key information for public health inspectors to address transmission risk in personal service establishments (PSEs) and other public settings.”



A renewed attention on environmental equity and justice [blog]

Leah Rosenkrantz, Knowledge Translation Scientist, National Collaborating Centre for Environmental Health

“...this blog discusses these concepts and highlights the ways environmental health professionals can begin to identify environmental inequities in their communities and resources to help address these inequities.”more



Lowering workplace and community risks through proactive engagement with the cannabis industry [blog]

Kimiko Banati, WorkSafeBC Occupational Hygiene Officer, and Angela Eykelbosh, Knowledge Translation Scientist, NCCEH

“This blog describes the results of a recent [WorkSafeBC](#) project involving cannabis producers in British Columbia, and provides a rapid overview of the hazards observed in cannabis processing and extraction facilities[...]. “...more



Do-it-yourself (DIY) air cleaners: Evidence on effectiveness and considerations for safe operation [upcoming webinar] Jan 26, 2023

Angela Eykelbosh, Knowledge Translation Scientist, NCCEH

This webinar will highlight the findings of our upcoming NCCEH review on DIY air cleaner effectiveness compared to commercial units. The document also compares the various DIY air cleaner designs regarding cost effectiveness, energy efficienc”y...more



NCCEH eNews (Nov2022): Radon action month; Focus on health in the balance of energy retrofits and indoor air quality; more...

National Collaborating Centre for Environmental Health



November research scan with COVID-19 sections [blog]

National Collaborating Centre for Environmental Health



ENVIRONMENTAL HEALTH RESEARCH SCAN

SELECTED PUBLICATIONS and WEBINARS

1. Banati K, Eykelbosh A. **Lowering workplace and community risks through proactive engagement with the cannabis industry [blog]**. Vancouver, BC: National Collaborating Centre for Environmental Health; 2022 Dec 13. Available from: <https://ncceh.ca/content/blog/lowering-workplace-and-community-risks-through-proactive-engagement-cannabis-industry>.
2. Eykelbosh A. **Do-it-yourself (DIY) air cleaners: Evidence on effectiveness and considerations for safe operation [webinar]**. Vancouver, BC: National Collaborating Centre for Environmental Health; 2023 Jan 26. Available from: <https://ncceh.ca/content/ncceh-environmental-health-seminar-series>.
3. National Collaborating Centre for Environmental Health. **NCCEH eNews (Nov2022): Radon action month; Focus on health in the balance of energy retrofits and indoor air quality; more...** Vancouver, BC: NCCEH; 2022 Oct 20. Available from: <https://tinyurl.com/23ajzwy7>.

4. National Collaborating Centre for Environmental Health. **Nov research scan with COVID-19 sections [blog]**. Vancouver, BC: NCCEH; 2022 Nov 24. Available from: <https://ncceh.ca/content/blog/november-research-scan-covid-19-sections-1>.
5. National Collaborating Centre for Environmental Health. **Sea level rise and public health [topic page]**. Vancouver, BC: NCCEH; 2022 Dec 8. Available from: <https://ncceh.ca/environmental-health-in-canada/health-agency-projects/sea-level-rise-and-public-health>.
6. Rosencrantz L. **A renewed attention on environmental equity and justice [blog]**. Vancouver, BC: National Collaborating Centre for Environmental Health; 2022 Dec 12. Available from: <https://ncceh.ca/content/blog/renewed-attention-environmental-equity-and-justice>.
7. Rosencrantz L, Eykelbosh A. **Mpox in personal service establishments: Low risk, but know the signs [blog]**. Vancouver, BC: National Collaborating Centre for Environmental Health; 2022 Nov 23. Available from: <https://ncceh.ca/content/blog/monkeypox-personal-service-establishments>.
8. Wade T. **Health risks associated with sea level rise [evidence review]**. Vancouver, BC: National Collaborating Centre for Environmental Health; 2022 Dec 7. Available from: <https://ncceh.ca/documents/evidence-review/health-risks-associated-sea-level-rise>.
9. Wade T. **Overview of Canadian communities exposed to sea level rise [evidence review]**. Vancouver, BC: National Collaborating Centre for Environmental Health; 2022 Dec 7. Available from: <https://ncceh.ca/documents/evidence-review/overview-canadian-communities-exposed-sea-level-rise>.

INDIGENOUS ENVIRONMENTAL HEALTH

1. McEachern LW, Harris S, Valaitis R, Watson A, Yessis J, Zupko B, et al. **Learning Circles: A Collaborative Approach to Enhance Local, Healthy and Traditional Foods for Youth in the Northerly Community of Hazelton/Upper Skeena, British Columbia, Canada**. *Int J Environ Res Public Health*. 2022;19(23):15878. Available from: <https://www.mdpi.com/1660-4601/19/23/15878>.

AGRICULTURAL OPERATIONS

1. Ghezalje A, Gutberlet J, Cloutier D. **Recent challenges and new possibilities with urban agriculture in Victoria, British Columbia**. *The Canadian Geographer / Le Géographe canadien*. 2022;66(4):696-711. Available from: <https://onlinelibrary.wiley.com/doi/abs/10.1111/cag.12783>.
2. Nowysz A, Mazur Ł, Vaverková MD, Koda E, Winkler J. **Urban Agriculture as an Alternative Source of Food and Water Security in Today's Sustainable Cities**. *Int J Environ Res Public Health*. 2022;19(23):15597. Available from: <https://www.mdpi.com/1660-4601/19/23/15597>.

BIOLOGICAL AGENTS

BUILT ENVIRONMENT

1. Larouche R, Moore S, Bélanger M, Brussoni M, Faulkner G, Gunnell K, et al. **Parent-Perceived Changes in Active Transportation and Independent Mobility among Canadian Children in Relation to the COVID-19 Pandemic: Results from Two National Surveys**. *Children, Youth and*

- Environments.** 2022;32(3):25-52. Available from: <https://journals.uc.edu/index.php/cye/article/view/6361>.
2. Lorentzen JC, Johanson G, Björk F, Stensson S. **Overcrowding and Hazardous Dwelling Condition Characteristics: A Systematic Search and Scoping Review of Relevance for Health.** Int J Environ Res Public Health. 2022;19(23):15542. Available from: <https://www.mdpi.com/1660-4601/19/23/15542>.
 3. Riva A, Rebecchi A, Capolongo S, Gola M. **Can Homes Affect Well-Being? A Scoping Review among Housing Conditions, Indoor Environmental Quality, and Mental Health Outcomes.** Int J Environ Res Public Health. 2022;19(23):15975. Available from: <https://www.mdpi.com/1660-4601/19/23/15975>.
 4. Rodrigue L, Daley J, Ravensbergen L, Manaugh K, Wasfi R, Butler G, et al. **Factors influencing subjective walkability: Results from built environment audit data.** Journal of Transport and Land Use. 2022;15(1):709-27. Available from: <https://jtl.org/index.php/jtl/article/view/2234>.
 5. Translink. **Rapid Implementation Design Guide for Bikeways in Metro Vancouver.** Vancouver, BC: Translink; 2022. Available from: https://www.translink.ca/-/media/translink/documents/cycling/regional-cycling-strategy/rapid_implementation_design_guide_for_bikeways_in_metro_vancouver.pdf.
 6. Wolfe M, McDonald N, Ussery E, George S, Watson K. **Systematic Review of Active Travel to School Surveillance in the United States And Canada.** Journal of Healthy Eating and Active Living. 2021;1(3):127-41. Available from: <https://profpubs.com/index.php/jheal/article/view/24>.

CHEMICAL AGENTS – METALS, GENERAL

General

1. Deeney M, Yates J, Green R, Kadiyala S. **Centring human health in the global plastics treaty: a call to action.** BMJ Global Health. 2022;7(11):e011040. Available from: <https://gh.bmj.com/content/bmjgh/7/11/e011040.full.pdf>.
2. Vince J, Praet E, Schofield J, Townsend K. **'Windows of opportunity': exploring the relationship between social media and plastic policies during the COVID-19 Pandemic.** Policy Sciences. 2022;55(4):737-53. Available from: <https://doi.org/10.1007/s11077-022-09479-x>.

CHEMICAL AGENTS – PESTICIDES

CHEMICAL AGENTS – SHALE GAS

CHILDREN'S ENVIRONMENTAL HEALTH

1. Strawn JR, Xu Y, Cecil KM, Houry J, Altaye M, Braun JM, et al. **Early exposure to flame retardants is prospectively associated with anxiety symptoms in adolescents: A prospective birth cohort study.** Depress Anxiety. 2022;39(12):780-93. Available from: <https://onlinelibrary.wiley.com/doi/abs/10.1002/da.23284>.

CLIMATE CHANGE

1. Amolegbe SM, Lopez AR, Velasco ML, Carlin DJ, Heacock ML, Henry HF, et al. **Adapting to Climate Change: Leveraging Systems-Focused Multidisciplinary Research to Promote Resilience.** *Int J Environ Res Public Health.* 2022;19(22):14674. Available from: <https://www.mdpi.com/1660-4601/19/22/14674>.
2. Barron S, Rugel EJ. **Tolerant greenspaces: Designing urban nature-based solutions that foster social ties and support mental health among young adults.** *Environ Sci Pol.* 2023;139:1-10. Available from: <https://www.sciencedirect.com/science/article/pii/S1462901122003148>.
3. British Columbia Environment and Climate Change. **Annual climate report shows progress made in key areas.** Victoria, BC: Government of British Columbia; 2022. Available from: <https://news.gov.bc.ca/releases/2022ENV0067-001764>.
4. Council of Canadian Academies. **Nature-Based Climate Solutions. Expert Panel on Canada's Carbon Sink Potential** Council of Canadian Academies; 2022. Available from: https://www.cca-reports.ca/wp-content/uploads/2022/12/Carbon-Sinks_EN_Final.pdf.
5. Environment and Climate Change Canada. **Canada's National Adaptation Strategy Building Resilient Communities and a Strong Economy.** Ottawa, ON: Government of Canada; 2022 Nov 25. Available from: <https://www.canada.ca/content/dam/eccc/documents/pdf/climate-change/climate-plan/national-adaptation-strategy/national-adaptation-strategy.pdf>.
6. Environment and Climate Change Canada. **Government of Canada Adaptation Action Plan.** Ottawa, ON: Government of Canada; 2022 Nov 25. Available from: <https://www.canada.ca/content/dam/eccc/documents/pdf/climate-change/climate-plan/national-adaptation-strategy/GCAAP-Report-EN.pdf>.
7. Herbert Y, Dale A, Stashok C. **Canadian cities: climate change action and plans.** *Buildings and Cities.* 2022;3(1):854–73. Available from: <http://doi.org/10.5334/bc.251>.
8. Lindsay S, Hsu S, Ragunathan S, Lindsay J. **The impact of climate change related extreme weather events on people with pre-existing disabilities and chronic conditions: a scoping review.** *Disabil Rehabil.* 2022:1-21. Available from: <https://doi.org/10.1080/09638288.2022.2150328>.
9. Mailman School of Public Health. **Global consortium on climate and health education [podcast: Be the Expert: Episode 7: No urban legend (part 2 - opportunistic pathogens)].** New York, NY: Columbia University; 2022. Available from: <https://open.spotify.com/episode/6Qvwdq1r2qceyTnvqw0k4D?si=ef8d4e9158fc4161>
10. National Collaborating Centre for Environmental Health. **Sea level rise and public health [topic page].** Vancouver, BC: NCCEH; 2022 12 08 Dec 8. Available from: <https://ncceh.ca/environmental-health-in-canada/health-agency-projects/sea-level-rise-and-public-health>.
11. Public Health Agency of Canada. **Generating Knowledge to Inform Public Health Action on Climate Change in Canada.** Ottawa, ON: PHAC; 2022. Available from: https://nccdh.ca/resources/entry/generating-knowledge-to-inform-public-health-action-on-climate-change-in-canada?mc_cid=c20d63f11c&mc_eid=04816d6ac3.
12. Wade T. **Health risks associated with sea level rise [evidence review].** Vancouver, BC: National Collaborating Centre for Environmental Health; 2022 Dec 7. Available from: <https://ncceh.ca/documents/evidence-review/health-risks-associated-sea-level-rise>.

13. Wade T. **Overview of Canadian communities exposed to sea level rise [evidence review]**. Vancouver, BC: National Collaborating Centre for Environmental Health; 2022 Dec 7. Available from: <https://ncceh.ca/documents/evidence-review/overview-canadian-communities-exposed-sea-level-rise>.

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)

DRINKING WATER

1. McLaren L, Patterson SK, Faris P, Chen G, Thawer S, Figueiredo R, et al. **Fluoridation cessation and oral health equity: a 7-year post-cessation study of Grade 2 schoolchildren in Alberta, Canada**. Can J Public Health. 2022;113(6):955-68. Available from: <https://doi.org/10.17269/s41997-022-00654-4>.

EMERGENCY PREPAREDNESS

1. Eisenman DP, Galway LP. **The mental health and well-being effects of wildfire smoke: a scoping review**. BMC Public Health. 2022;22(1):2274. Available from: <https://doi.org/10.1186/s12889-022-14662-z>.
2. Ishaq S, Nahiduzzaman KM, Sultana SR, Rana A, Mohammadiun S, Yousefi P, et al. **Flood Resilient Governance in Okanagan Valley of British Columbia: Current Practices and Future Directives**. Environ Rev. 2022;0(ja):null. Available from: <https://cdnsiencepub.com/doi/abs/10.1139/er-2022-0006>.
3. Wan S, Yang X, Chen X, Qu Z, An C, Zhang B, et al. **Emerging marine pollution from container ship accidents: Risk characteristics, response strategies, and regulation advancements**. Journal of Cleaner Production. 2022;376:134266. Available from: <https://www.sciencedirect.com/science/article/pii/S0959652622038380>.

ENVIRONMENTAL HEALTH SURVEILLANCE

1. Berry I, Brown KA, Buchan SA, Hohenadel K, Kwong JC, Patel S, et al. **A better normal in Canada will need a better detection system for emerging and re-emerging respiratory pathogens**. Can Med Assoc J. 2022;194(36):E1250-E4. Available from: <https://www.cmaj.ca/content/cmaj/194/36/E1250.full.pdf>.
2. Canada Energy Regulator. **BERDI Search Tool - (Biophysical, (Socio)Economic, and Regional Data and Information)** 2022. Available from: <https://www.youtube.com/watch?v=FTGbWD110Po>.
3. Jeanjean M, Dron J, Allen BL, Gramaglia C, Austruy A, Lees J, et al. **Participatory environmental health research: A tool to explore the socio-exposome in a major european industrial zone**. Environ Res. 2022:114865. Available from: <https://www.sciencedirect.com/science/article/pii/S0013935122021922>.

ENVIRONMENTAL PLANNING

FOOD

Safety

GENERAL

1. Buse CG, Hancock T, Allison S, Astle B, Cole D, Fumerton R, et al. **Where are the ecological determinants of health?** *Can J Public Health*. 2022. Available from: <https://doi.org/10.17269/s41997-022-00720-x>.
2. Eidelman G, Hachard T, Cabaj J, Fierlbeck K, Loh L, McLaren L, et al. **The Municipal Role in Public Health**. Toronto, ON: University of Toronto; 2022. Available from: <https://tspace.library.utoronto.ca/handle/1807/125715>.
3. Fisher S, Rosella LC. **Priorities for successful use of artificial intelligence by public health organizations: a literature review**. *BMC Public Health*. 2022;22(1):1-14. Available from: <https://doi.org/10.1186/s12889-022-14422-z>.

Health Policy

1. Shaban T, Brunet-Jailly E. **COVID-19 in British Columbia, Canada. Health policy responses and social adaptation**. *Public Behavioural Responses to Policy Making during the Pandemic*. New York, NY: Routledge; 2022. Available from: <https://www.taylorfrancis.com/chapters/edit/10.4324/9781003244127-10/covid-19-british-columbia-canada-tatsiana-shaban-emmanuel-brunet-jailly>.

HEALTH EQUITY

1. Kirby-McGregor M, Chen C, Chen H, Benmarhnia T, Kaufman JS. **Inequities in ambient fine particulate matter: A spatiotemporal analysis in Canadian communities**. *Sci Total Environ*. 2023;858:159766. Available from: <https://www.sciencedirect.com/science/article/pii/S0048969722068668>.
2. Kirkby K, Schlotheuber A, Vidal Fuertes C, Ross Z, Hosseinpoor AR. **Health Equity Assessment Toolkit (HEAT and HEAT Plus): exploring inequalities in the COVID-19 pandemic era**. *Int J Equity Health*. 2022;21:NA. Available from: <https://link.gale.com/apps/doc/A729052320/HRCA?u=ubcolumbia&sid=bookmark-HRCA&xid=8e37f26e>.
3. Madani MT, Madani L, Ghogomu ET, Dahrouge S, Hébert PC, Juando-Prats C, et al. **Is equity considered in systematic reviews of interventions for mitigating social isolation and loneliness in older adults?** *BMC Public Health*. 2022;22(1):2241. Available from: <https://doi.org/10.1186/s12889-022-14667-8>.
4. Murray MH, Buckley J, Byers KA, Fake K, Lehrer EW, Magle SB, et al. **One Health for All: Advancing Human and Ecosystem Health in Cities by Integrating an Environmental Justice Lens**. *Annual Review of Ecology, Evolution, and Systematics*. 2022;53(1):403-26. Available from: <https://www.annualreviews.org/doi/abs/10.1146/annurev-ecolsys-102220-031745>.

5. Public Health Agency of Canada. **Monitoring changes in health inequalities through time: A scan of international initiatives and a rapid review of scientific literature.** Ottawa, ON: PHAC; 2022. Available from: <https://www.canada.ca/en/public-health/services/publications/science-research-data/monitoring-changes-health-inequalities-scan-international-initiatives-rapid-review-scientific-literature.html>.
6. Rosencrantz L. **A renewed attention on environmental equity and justice [blog].** Vancouver, BC: National Collaborating Centre for Environmental Health; 2022 Dec 12. Available from: <https://ncceh.ca/content/blog/renewed-attention-environmental-equity-and-justice>.
7. Wodtke GT, Ard K, Bullock C, White K, Priem B. **Concentrated poverty, ambient air pollution, and child cognitive development.** Science Advances. 2022;8(48):eadd0285. Available from: <https://www.science.org/doi/abs/10.1126/sciadv.add0285>.

HEALTH IMPACT ASSESSMENT

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 Quality, Atmos Health. 2022. Available from: <https://doi.org/10.1007/s11869-022-01286-w>.
2. Eykelbosh A. **Do-it-yourself (DIY) air cleaners: Evidence on effectiveness and considerations for safe operation [webinar].** Vancouver, BC: National Collaborating Centre for Environmental Health; 2023 Jan 26. Available from: <https://ncceh.ca/content/ncceh-environmental-health-seminar-series>.
3. Li Y, Cheng P, Jia W. **Poor ventilation worsens short-range airborne transmission of respiratory infection.** Indoor Air. 2022;32(1):e12946. Available from: <https://onlinelibrary.wiley.com/doi/abs/10.1111/ina.12946>.
4. Mansouri A, Wei W, Alessandrini J-M, Mandin C, Blondeau P. **Impact of Climate Change on Indoor Air Quality: A Review.** Int J Environ Res Public Health. 2022;19(23):15616. Available from: <https://www.mdpi.com/1660-4601/19/23/15616>.

NUISANCE CONTROL

OUTDOOR AIR

1. Chen H, Quick M, Kaufman JS, Chen C, Kwong JC, van Donkelaar A, et al. **Impact of lowering fine particulate matter from major emission sources on mortality in Canada: A nationwide causal analysis.** Proceedings of the National Academy of Sciences. 2022;119(49):e2209490119. Available from: <https://www.pnas.org/doi/abs/10.1073/pnas.2209490119>.
2. Ganji A, Youssefi O, Xu J, Mallinen K, Lloyd M, Wang A, et al. Design, calibration, and testing of a mobile sensor system for air pollution and built environment data collection: The urban scanner platform. Environ Pollut. 2023;317:120720. Available from: <https://www.sciencedirect.com/science/article/pii/S0269749122019340>.

PERSONAL SERVICE ESTABLISHMENTS

PEST CONTROL

PHYSICAL AGENTS

1. Michaud DS, Marro L, Denning A, Shackleton S, Toutant N, McNamee JP. **Annoyance toward transportation and construction noise in rural suburban and urban regions across Canada.** Environ Impact Assess Rev. 2022;97:106881. Available from: <https://www.sciencedirect.com/science/article/pii/S0195925522001470>.
2. Terzakis ME, Dohmen M, van Kamp I, Hornikx M. **Noise Indicators Relating to Non-Auditory Health Effects in Children—A Systematic Literature Review.** Int J Environ Res Public Health. 2022;19(23):15633. Available from: <https://www.mdpi.com/1660-4601/19/23/15633>.

RADIATION

RECREATIONAL AND SURFACE WATER

RISK ASSESSMENT, COMMUNICATION

SENIORS' ENVIRONMENTAL HEALTH

1. Bouaziz G, Brulin D, Campo E. **Technological Solutions for Social Isolation Monitoring of the Elderly: A Survey of Selected Projects from Academia and Industry.** Sensors. 2022;22(22):8802. Available from: <https://www.mdpi.com/1424-8220/22/22/8802>.
2. Hoang P, King JA, Moore S, Moore K, Reich K, Sidhu H, et al. **Interventions Associated With Reduced Loneliness and Social Isolation in Older Adults: A Systematic Review and Meta-analysis.** JAMA Network Open. 2022;5(10):e2236676-e. Available from: <https://doi.org/10.1001/jamanetworkopen.2022.36676>.
3. Wang G, Kasraian D, Valk C, Lu Y, Hurst W, Jambroes M, et al. **A Toolkit for Co-Designing towards Community-Based Active Ageing: Lessons Learned during Development.** Int J Environ Res Public Health. 2022;19(23):15591. Available from: <https://www.mdpi.com/1660-4601/19/23/15591>.

TOBACCO, CANNABIS

WASTE

1. Abeygunawardena S, Kassen R, Fralick M. **Beyond wastewater surveillance: refining environmental pathogen detection in the built environment.** Can Med Assoc J. 2022;194(46):E1575-E. Available from: <https://www.cmaj.ca/content/cmaj/194/46/E1575.full.pdf>.

ZOONOSES

1. Evans A, AlShurman BA, Sehar H, Butt ZA. **Monkeypox: A Mini-Review on the Globally Emerging Orthopoxvirus**. Int J Environ Res Public Health. 2022;19(23):15684. Available from: <https://www.mdpi.com/1660-4601/19/23/15684>.
2. Mathieu E, Spooner F, Dattani S, Ritchie H, Roser M. **Mpox (monkeypox)”. Published online at OurWorldInData.org**. OurWorldInData.org; 2022. Available from: <https://ourworldindata.org/monkeypox>.
3. National Collaborating Center for Infectious Diseases. **Hand, Foot, and Mouth Disease (HFMD)**. Winnipeg, MB: NCCID; 2022 Nov. Available from: <https://nccid.ca/debrief/hand-foot-and-mouth-disease/>.
4. Rosencrantz L, Eykelbosh A. **Mpox in personal service establishments: Low risk, but know the signs [blog]**. Vancouver, BC: National Collaborating Centre for Environmental Health; 2022 Nov 23. Available from: <https://ncceh.ca/content/blog/monkeypox-personal-service-establishments>.
5. Yan X, Fang Y, Li Y, Jia Z, Zhang B. **Risks, Epidemics, and Prevention Measures of Infectious Diseases in Major Sports Events: Scoping Review**. JMIR Public Health Surveill. 2022;8(12):e40042. Available from: <https://doi.org/10.2196/40042>.

COVID-19 ADDITIONAL TOPICS & GUIDANCE



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

GUIDANCE (for ‘Occupational Guidance’ – see separate topic heading)

Policy

1. Won J-Y, Lee Y-R, Cho M-H, Kim Y-T, Heo B-Y. **Impact of Government Intervention in Response to Coronavirus Disease 2019**. *Int J Environ Res Public Health*. 2022;19(23):16070. Available from: <https://www.mdpi.com/1660-4601/19/23/16070>.

HOMELESS, VULNERABLE POPULATIONS, HOUSING

MENTAL HEALTH

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MULTI-UNIT BUILDINGS

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Occupational

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