

# ENVIRONMENTAL HEALTH RESEARCH SCAN

## WITH COVID-19 SECTIONS

### VOL 4 (10) OCTOBER 2020



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#### *Environmental Health (EH) Research Scan: Aims and Scope*

NCCEH's EH Research Scan aims to expand awareness of topics in environmental health, in line with NCCEH's vision to be the indispensable online resource for environmental health practitioners and policy-makers across Canada. "We focus on health risks associated with the physical environment and identify evidence-based interventions to mitigate those risks." This review is not official or peer reviewed. It does not cover all research, news, and information, and NCCEH is not responsible for the accuracy of the content from media or databases. How to access the items? Click on the link related to each entry and it should take you to the item. Not all links are open access; some are abstract links where paid journal subscription is required. **COVID-19 Publications** are listed in the sections above and there are also **COVID-19 Additional Topics** at the end of this issue.



National Collaborating Centre  
for Environmental Health

Centre de collaboration nationale  
en santé environnementale

## EDITOR PICKS

### COVID-19 management during public health emergencies [topic page]

Angela Eykelbosh, National Collaborating Centre for Environmental Health

*“This topic page is intended to gather resources that address how typical emergency management practices and procedures may need to be adapted to a pandemic context.”*



### Reducing COVID-19 transmission through cleaning and disinfecting household surfaces [guidance document]

Tina Chen, National Collaborating Centre for Environmental Health

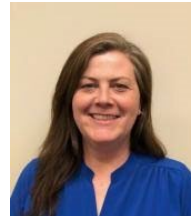
*“This document provides information to public health professionals who may be consulted on the appropriate use of cleaning and disinfection products as well as frequency of cleaning and disinfecting in homes to protect the health of the public.”*



### COVID-19 Risks and precautions for the performing arts [webinar]

Juliette O’Keeffe, National Collaborating Centre for Environmental Health

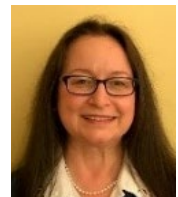
*“This presentation reviewed current understanding of the key risks associated with the performing arts sector, and the precautions for minimizing risks of COVID-19 transmission in various settings.”*



### KALAMITea - Kombucha alcohol levels affecting mothers, infants and toddlers [webinar]

Lorraine McIntyre, BC Centre for Disease Control

*“[Findings...] Overall, 31.5% of samples had ethanol levels that exceeded the regulations (the highest level was found in restaurant kombucha at 3.62% ABV). The final report contains recommendations for alcohol control during manufacture, refrigeration requirements and consumer label warnings.”*



### Environmental Health Resources for the COVID-19 Pandemic [topic page]

National Collaborating Centre for Environmental Health

NCCEH has prepared a specially curated topic page on Covid-19. Visit <http://www.ncceh.ca/environmental-health-canada/ncceh-health-agency-project/desc>



## ENVIRONMENTAL HEALTH RESEARCH SCAN

### SELECTED STAFF PUBLICATIONS

#### NCCEH

1. Eykelbosh A (Knowledge Translation Scientist for the National Collaborating Centre for Environmental Health). **Infectious Questions: Episode 18: Information and evidence for preventing COVID-19 transmission in multi-unit residential buildings (MURBs) [podcast]**. Winnipeg, MB: University, National Collaborating Centre for Infectious Diseases; 2020 Sep 23. Available from: <https://nccid.ca/podcast-2019-ncov/#subMenuSection0>.
2. Chen T. **Reducing COVID-19 transmission through cleaning and disinfecting household surfaces [Guidance Document]**. Vancouver, BC: National Collaborating Centre for Environmental Health; 2020 Oct 14. Available from: <https://ncceh.ca/sites/default/files/Reducing%20COVID-19%20Transmission%20Through%20Cleaning%20and%20Disinfecting%20Household%20Surfaces%20Final%20Oct%2014%202020.pdf>.
3. National Collaborating Centre for Environmental Health. **COVID-19 management during public health emergencies**. Vancouver, BC: NCCEH; 2020. Available from: <https://ncceh.ca/environmental-health-in-canada/health-agency-projects/covid-19-management-during-public-health>.
4. National Collaborating Centre for Environmental Health. **Environmental health resources for the COVID-19 pandemic**. Vancouver, BC: NCCEH; 2020. Available from: <https://ncceh.ca/environmental-health-in-canada/health-agency-projects/environmental-health-resources-covid-19>.
5. National Collaborating Centre for Environmental Health. **September research scan with COVID-19 [blog]**. Vancouver, BC: NCCEH; 2020 09 22 Sep 22. Available from: <https://ncceh.ca/content/blog/september-research-scan-covid-19-sections>.
6. National Collaborating Centre for Environmental Health. **NCCEH eNews (September 2020) : COVID-19 Risks and precautions for the performing arts**. Vancouver, BC: NCCEH; 2020 09 24 Sep. Available from: <https://tinyurl.com/y6evbat3>.
7. National Collaborating Centre for Healthy Public Policy. **Online Course: An Introduction to Public Health Ethics**. Montreal, QC: Institut national de sante publique (INSPQ); 2020 Oct. Available from: [http://www.ncchpp.ca/872/Online\\_Course.ccnpps?utm\\_source=Cyberimpact&utm\\_medium=email&utm\\_campaign=E--Bulletin-October-2020](http://www.ncchpp.ca/872/Online_Course.ccnpps?utm_source=Cyberimpact&utm_medium=email&utm_campaign=E--Bulletin-October-2020).
8. National Collaborating Centres for Public Health. **What is The National Collaborating Centres for Public Health (NCCPH)? [video]**: National Collaborating Centres for Public Health; 2020 08 05. Available from: <https://ncceh.ca/videos/what-national-collaborating-centres-public-health-nccph>.
9. O’Keeffe J. **COVID-19 risks and precautions for the performing arts [evidence review]**. Vancouver, BC: National Collaborating Centre for Environmental Health; 2020 09 24 Sep 24. Available from: <https://ncceh.ca/documents/covid-19-risks-and-precautions-performing-arts>.
10. O’Keeffe J. **COVID-19 Risks and precautions for the performing arts [webinar]**. Vancouver, BC: National Collaborating Centre for Environmental Health; 2020 09 30 Sep 30. Available from: <https://ncceh.ca/content/covid-19-risks-and-precautions-performing-arts>.

## BCCDC

1. McIntyre L. **KALAMITea - Kombucha alcohol levels affecting mothers, infants and toddlers [webinar]**. Vancouver, BC: National Collaborating Centre for Environmental Health; 20201022 Oct 22. Available from: <https://nccch.ca/content/nccch-environmental-health-seminar-series>.

## INDIGENOUS ENVIRONMENTAL HEALTH

1. Bradette-Laplanche M, Courtemanche Y, Desrochers-Couture M, Forget-Dubois N, Bélanger RE, Ayotte P, et al. **Food insecurity and psychological distress in Inuit adolescents of Nunavik**. Public Health Nutr. 2020;23(14):2615-25. Available from: <https://doi.org/10.1017/S1368980020000117>.
2. Moriarty RJ, Liberda EN, Tsuji LJS. **Subsistence fishing in the Eeyou Istchee (James Bay, Quebec, Canada): A regional investigation of fish consumption as a route of exposure to methylmercury**. Chemosphere. 2020;258:127413. Available from: <https://doi.org/10.1016/j.chemosphere.2020.127413>.
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4. Nishnawbe Aski First Nation. **Guidance for funerals and bereavement**. Thunder Bay, ON: NAN; 2020 Sep. Available from: <https://nancovid19.ca/?p=3069>.
5. Richardson L, Crawford A. **COVID-19 and the decolonization of Indigenous public health**. Can Med Assoc J. 2020;192. Available from: <https://www.cmaj.ca/content/cmaj/192/38/E1098.full.pdf>.
6. Zavaleta-Cortijo C, Ford JD, Arotoma-Rojas I, Lwasa S, Lancha-Rucoba G, García PJ, et al. **Climate change and COVID-19: reinforcing Indigenous food systems**. The Lancet Planetary health. 2020;4(9):e381-e2. Available from: [https://doi.org/10.1016/S2542-5196\(20\)30173-X](https://doi.org/10.1016/S2542-5196(20)30173-X).

## AGRICULTURAL OPERATIONS

1. Stephanie Mayell (of the Migrant Worker Health Expert Working Group). **Infectious Questions: Episode 17: The burden of COVID-19 among migrant agricultural workers in Canada) [podcast]**. Winnipeg, MB: University, National Collaborating Centre for Infectious Diseases; 2020 Sep 14. Available from: <https://nccid.ca/podcast-2019-ncov/#subMenuSection0>.

## BIOLOGICAL AGENTS

## BUILT ENVIRONMENT

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2. Choe E, Kenyon A, Sharp L. **Designing blue green infrastructure (BGI) for water management, human health, and wellbeing: summary of evidence and principles for design.** Sheffield, UK: **University of Sheffield**; 2020. Available from: [https://figshare.shef.ac.uk/articles/report/Designing\\_Blue\\_Green\\_Infrastructure\\_BGI\\_for\\_water\\_management\\_human\\_health\\_and\\_wellbeing\\_summary\\_of\\_evidence\\_and\\_principles\\_for\\_design/13049510](https://figshare.shef.ac.uk/articles/report/Designing_Blue_Green_Infrastructure_BGI_for_water_management_human_health_and_wellbeing_summary_of_evidence_and_principles_for_design/13049510).
3. Conway T, Scott JL. **Urban forests in a changing climate.** Mississauga, ON: Greenbelt Foundation and the University of Toronto; 2020 Sep. Available from: [https://d3n8a8pro7vnm.cloudfront.net/greenbelt/pages/14604/attachments/original/1600457503/UrbanForestsChangingClimate\\_REPORT\\_E-ver\\_REV.pdf?1600457503](https://d3n8a8pro7vnm.cloudfront.net/greenbelt/pages/14604/attachments/original/1600457503/UrbanForestsChangingClimate_REPORT_E-ver_REV.pdf?1600457503).
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5. Megahed NA, Ghoneim EM. **Antivirus-built environment: Lessons learned from Covid-19 pandemic.** Sustainable cities and society. 2020;61:102350-. Available from: <https://pubmed.ncbi.nlm.nih.gov/32834930>

## CHEMICAL AGENTS – METALS, GENERAL

### BPA

1. Zettergren A, Andersson N, Larsson K, Kull I, Melén E, Georgelis A, et al. **Exposure to environmental phthalates during preschool age and obesity from childhood to young adulthood.** Environ Res. 2021;192:110249. Available from: <http://www.sciencedirect.com/science/article/pii/S0013935120311464>.

## CHEMICAL AGENTS – PESTICIDES

## CHEMICAL AGENTS – SHALE GAS

1. Li L, Blomberg AJ, Spengler JD, Coull BA, Schwartz JD, Koutrakis P. **Unconventional oil and gas development and ambient particle radioactivity.** Nature Communications. 2020;11(1):5002. Available from: <https://doi.org/10.1038/s41467-020-18226-w>.

## CHILDREN'S ENVIRONMENTAL HEALTH

1. Alberta Health Services. Topic: What role might children play in community SARS-CoV-2 transmission? What measures might mitigate potential additional risk of transmission of COVID-19 related to school and daycare reopening? Edmonton, AB: AHS; 2020 Aug 7. Available from: <https://www.albertahealthservices.ca/assets/info/ppih/if-ppih-covid-19-sag-role-of-children-in-community-transmission-rapid-review.pdf>.
2. Araújo LAd, Veloso CF, Souza MdC, Azevedo JMCd, Tarro G. **The potential impact of the COVID-19 pandemic on child growth and development: a systematic review.** J Pediatr (Rio J). 2020;S0021-7557(20)30209-6. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7510529/>.



3. Bigambo FM, Sun H, Yan W, Wu D, Xia Y, Wang X, et al. **Association between phenols exposure and earlier puberty in children: A systematic review and meta-analysis.** Environ Res. 2020;190:110056. Available from: <https://doi.org/10.1016/j.envres.2020.110056>.
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6. Children's Mental Health Ontario. **Potential impacts of COVID-19 on child and youth mental health. Considerations for service planning during and post-pandemic.** 2020. Available from: <https://www.cymh.ca/en/projects/resources/covid-19/covid-19-pandemic-impacts-on-child-and-youth-mental-health.pdf>.
7. Dai M, Euling SY, Phillips L, Rice GE. **ExpoKids: An R-based tool for characterizing aggregate chemical exposure during childhood.** J Expo Sci Environ Epidemiol. 2020. Available from: <https://doi.org/10.1038/s41370-020-00265-6>.
8. Jüni P, Maltsev A, Bobos P, Allen U, Choi Y, Connell JP, et al. **The Role of Children in SARS-CoV-2 Transmission.** Science Table; 2020 Aug 31. Available from: <https://doi.org/10.47326/ocsat.2020.01.03.1.0>.
9. Public Health Ontario. **School and COVID-19.** Toronto, ON: PHO; 2020; Available from: <https://www.publichealthontario.ca/en/diseases-and-conditions/infectious-diseases/respiratory-diseases/novel-coronavirus/school-resources?cldee=bWljaGVsZS53aWVuc0BiY2NkYy5jYQ%3d%3d&recipientid=contact-c7ccc0a5b4a2e611837d0050569e0009-d59960ccdcfc49bd8c663e3419530db6&esid=98852f2b-0ff9-ea11-81c3-0050569e118f>.
10. Rice K, Wynne B, Martin V, Ackland GJ. **Effect of school closures on mortality from coronavirus disease 2019: old and new predictions.** BMJ. 2020;371:m3588. Available from: <https://www.bmj.com/content/bmj/371/bmj.m3588.full.pdf>.
11. Singh S, Roy D, Sinha K, Parveen S, Sharma G, Joshi G. **Impact of COVID-19 and lockdown on mental health of children and adolescents: A narrative review with recommendations.** Psychiatry Res. 2020;293:113429-. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7444649/>.

## CLIMATE CHANGE

1. Agius JC, England K, Calleja N. **The effect of global warming on mortality.** Early Hum Dev. 2020;105222. Available from: <http://www.sciencedirect.com/science/article/pii/S0378378220307088>.
2. Lee K, Gjersoe N, O'Neill S, Barnett J. **Youth perceptions of climate change: A narrative synthesis.** WIREs Climate Change. 2020;11(3):e641. Available from: <https://onlinelibrary.wiley.com/doi/abs/10.1002/wcc.641>.
3. Wu J, Snell G, Samji H. **Climate anxiety in young people: a call to action.** The Lancet Planetary Health. 2020;4(10):e435-e6. Available from: [https://doi.org/10.1016/S2542-5196\(20\)30223-0](https://doi.org/10.1016/S2542-5196(20)30223-0).

## 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., Cleaning, Temperature Scanning)

## DRINKING WATER

1. Athey SN, Adams JK, Erdle LM, Jantunen LM, Helm PA, Finkelstein SA, et al. **The Widespread Environmental Footprint of Indigo Denim Microfibers from Blue Jeans.** Environ Sci Technol Lett. 2020. Available from: <https://doi.org/10.1021/acs.estlett.0c00498>.
2. Commission for Environmental Cooperation, North American Law and Policy. **Alberta tailings pond II. Factual Record regarding Submission SEM-17-001.** Montreal, QC: Commission for Environmental Cooperation; 2020. Available from: <http://s3.documentcloud.org/documents/7202001/17-1-Ffr-En.pdf>.
3. Felton R. **What's really in your bottled water?** Consum Rep. 2020. Available from: [https://www.consumerreports.org/bottled-water/whats-really-in-your-bottled-water/?ct=t\(RSS\\_EMAIL\\_CAMPAIGN\)](https://www.consumerreports.org/bottled-water/whats-really-in-your-bottled-water/?ct=t(RSS_EMAIL_CAMPAIGN)).
4. Health Canada. **Proposed Guidelines for Canadian Recreational Water Quality — Cyanobacteria and their Toxins.** Ottawa, ON: PHAC; 2020 Aug 22. Available from: <http://gazette.gc.ca/rp-pr/p1/2020/2020-08-22/html/notice-avis-eng.html#ne3>.
5. Nor NAM, Chadwick BL, Farnell DJ, Chestnutt IG. **The impact of stopping or reducing the level of fluoride in public water supplies on dental fluorosis: a systematic review.** Rev Environ Health. 2020(0):20190059. Available from: <https://www.degruyter.com/view/journals/reveh/ahead-of-print/article-10.1515-reveh-2019-0059/article-10.1515-reveh-2019-0059.xml>.
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## EMERGENCY PREPAREDNESS

1. **Research Brief: The role of language technologies and government policies to facilitate and support effective multicultural and multilingual crisis communication.** Australia: Monash University; 2020 Sep. Available from: <https://www.monash.edu/arts/monash-intercultural-lab/news-and-events/articles/research-brief-the-role-of-language-technologies-and-government-policies>.
2. Health Canada. **Guidance for Cleaner Air Spaces during Wildfire Smoke Events.** Ottawa, ON: Health Canada; 2020 Sep. Available from: <https://www.canada.ca/en/health-canada/services/publications/healthy-living/guidance-cleaner-air-spaces-during-wildfire-smoke-events.html>.
3. National Collaborating Centre for Environmental Health. **COVID-19 management during public health emergencies.** Vancouver, BC: NCCEH; 2020. Available from: <https://ncceh.ca/environmental-health-in-canada/health-agency-projects/covid-19-management-during-public-health>.
4. Sante Canada. **Lignes directrices relatives aux espaces antifumée pendant les épisodes de fumée de feux de forêt.** Ottawa, ON: Sante Canada; 2020. Available from: <https://www.canada.ca/fr/sante-canada/services/publications/vie-saine/lignes-directrices-relatives-espaces-antifumee-pendant-episodes-fumee-feux-foret.html>.

## ENVIRONMENTAL HEALTH SURVEILLANCE

1. Lapointe-Shaw L, Rader B, Astley CM, Hawkins JB, Bhatia D, Schatten WJ, et al. **Web and phone-based COVID-19 syndromic surveillance in Canada: A cross-sectional study.** PLoS ONE. 2020;15(10):e0239886. Available from: <https://doi.org/10.1371/journal.pone.0239886>.

## ENVIRONMENTAL PLANNING

### FOOD

#### Safety

1. Billings KC, Webster EM, Lee EA. **Chapter 6. Food Banks and Other Emergency Feeding Organizations: Federal Aid and the Response to COVID-19.** In: Goldschmidt K, editor. COVID 19: Agricultural and Food Issues. Hauppauge, NY: NOVA Publishers; 2020. Available from: <https://novapublishers.com/shop/covid-19-agricultural-and-food-issues/>.
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5. Lee BY. **Can Frozen Food Packaging Spread Covid-19? China CDC Finds Live Coronavirus.** Forbes; 2020 Oct 10. Available from: <https://www.forbes.com/sites/brucelee/2020/10/18/can-frozen-food-packaging-spread-covid-19-china-cdc-finds-live-coronavirus/#5842606a6967>.
6. McIntyre L. **KALAMITea - Kombucha alcohol levels affecting mothers, infants and toddlers [webinar].** Vancouver, BC: National Collaborating Centre for Environmental Health; 2020 Oct 22. Available from: <https://nccch.ca/content/nccch-environmental-health-seminar-series>.
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12. Yee I, Griffiths J. **Beijing says COVID-19 found in imported seafood, orders halt on frozen food from countries with major outbreaks.** Digital: CTV News; 2020 Sep 29. Available from:



<https://www.ctvnews.ca/health/coronavirus/beijing-says-covid-19-found-in-imported-seafood-orders-halt-on-frozen-food-from-countries-with-major-outbreaks-1.5124790>.

## Security

1. Hetrick RL, Rodrigo OD, Bocchini CE. **Addressing Pandemic-Intensified Food Insecurity**. Pediatrics. 2020;146(4):e2020006924. Available from: <https://pediatrics.aappublications.org/content/pediatrics/146/4/e2020006924.full.pdf>.
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## GENERAL

1. Bavel JJV, Baicker K, Boggio PS, Capraro V, Cichocka A, Cikara M, et al. **Using social and behavioural science to support COVID-19 pandemic response**. Nature Human Behaviour. 2020;4(5):460-71. Available from: <https://doi.org/10.1038/s41562-020-0884-z>.
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3. National Collaborating Centre for Environmental Health. **Environmental health resources for the COVID-19 pandemic**. Vancouver, BC: NCCEH; 2020. Available from: <https://ncceh.ca/environmental-health-in-canada/health-agency-projects/environmental-health-resources-covid-19>.
4. National Collaborating Centres for Public Health. **What is The National Collaborating Centres for Public Health (NCCPH)? [video]**: National Collaborating Centres for Public Health; 2020 08 05. Available from: <https://ncceh.ca/videos/what-national-collaborating-centres-public-health-nccph>.
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## COVID-19 ADDITIONAL TOPICS & GUIDANCE



### CONTENTS

- [GUIDANCE](#) (cleaning, face masks, hand hygiene, more)
- [HOMELESS, VULNERABLE POPULATIONS, HOUSING](#)
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- [TRANSIT, TRANSPORTATION](#)
- [TRANSMISSION](#)

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## MULTI-UNIT BUILDINGS

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